HCD-VR90AV

SERVICE MANUAL

E Model

HCD-VR90AV is the tuner, deck, CD and amplifier section in LBT-VR90AV.

This stereo system is equipped with the Dolby* B-type noise reduction system.
* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol □□ and "PRO LOGIC" are trademarks of the Dolby Laboratories Licensing Corporation.

CD Section	Model Name Using Similar Mechanism	HCD-VR50/VR70
	CD Mechanism Type	CDM37L-5BD34L
	Base Unit Name	BU-5BD34L
	Optical Pick-up Name	KSS-213D/Q-NP
Tape deck Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	TCM-230AWR2/230PWR2

SPECIFICATIONS

Amplifier section

Front Speaker:
The following measured at AC 120/220/240V, 50/60Hz
DIN power output (Rated) 130 + 130W
(6 Ω at 1 kHz, DIN)
Continuous RMS power output (Reference)
160 +160W
(6 Ω at 1 kHz, 10% THD)
Center Speaker:
DIN power output (Rated) 30W
(8 Ω at 1 kHz, DIN)
Continuous RMS power output (Reference)
40W
(8 Ω at 1 kHz, 10% THD)
Rear Speaker:
DIN power output (Rated) 30 + 30W
(8 Ω at 1 kHz, DIN)
Continuous RMS power output (Reference)
40 + 40W
(8 Ω at 1 kHz, 10% THD)

Inputs
PHONO IN (phono jacks): sensitivity 3mV, impedance 47k Ω
MIX MIC (phone jack): sensitivity 1mV, impedance 10k Ω
VIDEO1 IN (phono jacks): sensitivity 250mV, impedance 47k Ω
VIDEO2 IN (phono jacks): sensitivity 250mV, impedance 47k Ω
MD IN (phono jacks): sensitivity 450mV, impedance 47k Ω

DVD INPUT
FRONT (phono jacks): sensitivity 450mV, impedance 47k Ω
REAR (phono jacks): sensitivity 450mV, impedance 47k Ω
CENTER (phono jacks): sensitivity 450mV, impedance 47k Ω
WOOFER (phono jacks): sensitivity 450mV, impedance 47k Ω

Outputs
PHONES (stereo phone jack): accepts headphones of 8 Ω or more
VIDEO OUT (phono jack): voltage 250mV, impedance 1k Ω
MD OUT (phono jacks): voltage 250mV, impedance 1k Ω
WOOFER OUT (phono jack): voltage 1V, impedance 1k Ω
FRONT SPEAKER: accepts impedance of 8 to 16 Ω
CENTER SPEAKER: accepts impedance of 8 to 16 Ω
REAR SPEAKER: accepts impedance of 8 to 16 Ω

Video section

Inputs
VIDEO1 IN (phono jacks): 1Vp-p, 75 Ω
VIDEO2 IN (phono jacks): 1Vp-p, 75 Ω
DVD INPUT VIDEO (phono jacks): 1Vp-p, 75 Ω

Output
VIDEO OUT (phono jack): 1Vp-p, 75 Ω
S-VIDEO OUT (4-pin/mini-DIN jack):
Y : 1Vp-p, unbalanced, Sync negative,
C : 0.286 V p-p, load immpedance 75 Ω

— Continued on next page —

COMPACT Hi-Fi STEREO SYSTEM

MICROFILM

SONY®

VIDEO CD/CD player section

System	Compact disc and digital audio and video system
Laser	Semiconductor laser (λ=780nm) Emission duration: continuous
Laser output	Max. 44.6µW* * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Wave length	780 – 790 nm
Frequency response	2Hz – 20kHz (±0.5dB)
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB
Video color system format	NTSC, PAL

CD DIGITAL OUT
(square optical connector jack, rear panel)

Wave length:	660 nm
Output level:	–18dBm

Tape player section

Recording system	4-track 2-channel stereo
Frequency response (DOLBY NR OFF)	40 – 13,000Hz (±3dB), using a Sony TYPE I cassette 40 – 14,000Hz (±3dB), using a Sony TYPE II cassette
Wow and flutter	±0.15% W.Peak (IEC) 0.1% W.RMS (NAB) ±0.2% W.Peak (DIN)

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	87.5 – 108.0 kHz (100 kHz step)
Antenna	FM wire antenna
Antenna terminals	75 Ω unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
Middle Eastern model :	531 – 1,602 kHz (with the tuning interval set at 9 kHz)
Other models :	531 – 1,602 kHz (with the tuning interval set at 9 kHz) 530 – 1,710 kHz (with the tuning interval set at 10 kHz)
Antenna	AM loop antenna, External antenna terminals
Intermediate frequency	450 kHz

General

Power requirements	
Thai model :	220 V AC, 50/60 Hz
Other models :	120 V, 220V, or 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption	280 W
Dimensions (w/h/d)	Approx. 356 × 423 × 446 mm incl. projecting parts and controls
Mass	Approx. 15.0 kg
Supplied accessories	AM loop antenna (1) Remote RM-SV100AVB (1) R6 (size AA) batteries (2) FM wire antenna (1) Speaker cords (2) Video connecting cable

Design and specifications are subject to change without notice.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

The following caution label is located inside the unit.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

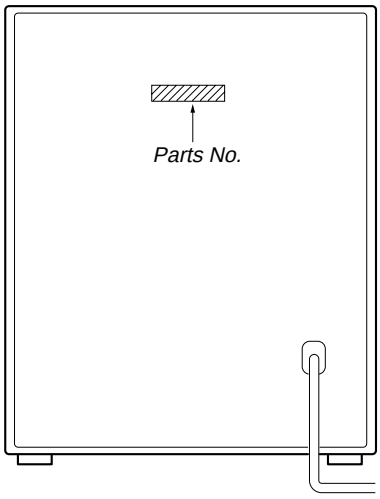
NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveform is output four times.

MODEL IDENTIFICATION — BACK PANEL —



PARTS No.	MODEL
4-214-793-0☐	MY,SP
4-214-793-1☐	EA
4-214-793-3☐	IA
4-214-793-4☐	TH

- Abbreviation
  IA : Indonesia model
  EA : Saudi Arabia model
  MY : Malaysia model
  SP : Singapore model
  TH : Thai model

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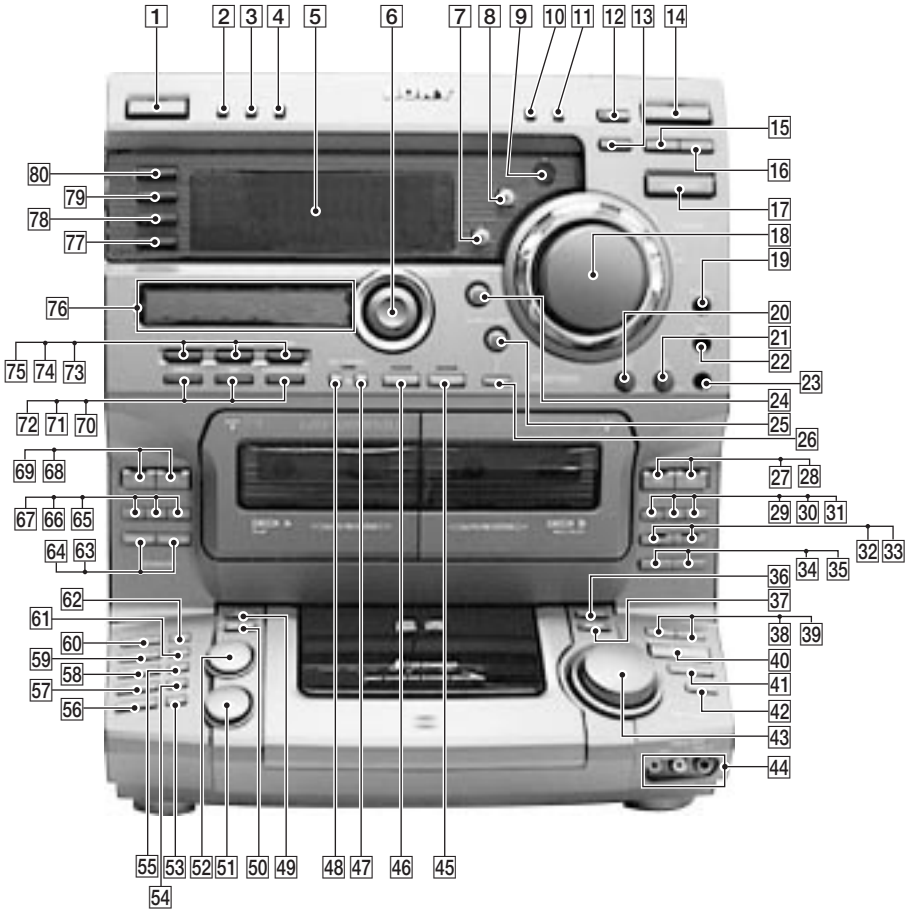
SECTION 1
GENERAL

Front Panel



Location of Parts and Controls

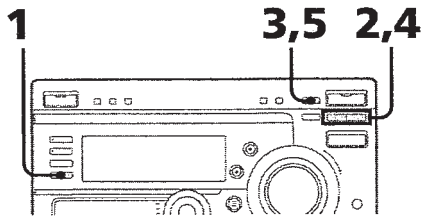
1 I/⏻ (Power) button
2 POWER SAVE/DEMO (STANDBY) button
3 DISPLAY button
4 SPECTRUM ANALYZER button
5 Display window
6 GEQ control button
7 SYNC BASS button
8 SYNC EQ button
9 Remote sensor
10 TUNING MODE button
11 STEREO/MONO button
12 ENTER/NEXT button
13 TUNER MEMORY button
14 TUNER/BAND button
15 TUNING - button
16 TUNING + button
17 FUNCTION button
18 VOLUME knob
19 PHONES jack
20 ECHO LEVEL knob
21 MIC LEVEL knob
22 MIC 1 jack
23 MIC 2 jack
24 GROOVE button
25 SUPER WOOFER button
26 MODE button
27 ◁ (B Deck) button and indicator
28 ▷ (B Deck) button and indicator
29 ■ (B Deck) button
30 ◀◀ (B Deck) button
31 ▶▶ (B Deck) button
32 ❚❚ (B Deck) button
33 ● REC (B Deck) button
34 HI-SPEED DUB button
35 CD SYNCHRO button
36 PLAY MODE button
37 REPEAT button
38 ◀◀ (CD) button
39 ▶▶ (CD) button
40 ▷/❚❚ (CD) button and indicator
41 ■ (CD) button
42 DISC SKIP button
43 I◀◀ AMS ▶▶I knob
44 VIDEO2 INPUT jacks
45 PRO LOGIC button and indicator
46 DVD 5.1 CH
47 KEY CONTROL # button
48 KEY CONTROL b button
49 EDIT button
50 NON-STOP button and indicator
51 FLASH button
52 LOOP button
53 NEXT button
54 PREV button
55 RETURN button
56 DISC 5 button
57 DISC 4 button
58 DISC 3 button
59 DISC 2 button
60 DISC 1 button
61 SELECT button
62 ACTIVE button
63 DOLBY NR button
64 DIRECTION button
65 ▶▶ (A Deck) button
66 ◀◀ (A Deck) button
67 ■ (A Deck) button
68 ▷ (A Deck) button
69 ◁ (A Deck) button
70 KARAOKE PON/MPX button
71 DSP button and indicator
72 EFFECT button and indicator
73 ENTER button and indicator
74 GEQ CONTROL button
75 P. FILE MEMORY
76 Equalizer indicators
77 ◴/CLOCK SET button
78 SLEEP button
79 REC button and indicator
80 DAILY button and indicator

• AMS is the abbreviation for Automatic Music Sensor.

This section is extracted from instruction manual.

Step 3: Setting the time

You must set the time before using the timer functions.



1 Press ⏲/CLOCK SET.
The hour indication flashes.

2 Press TUNING +/– to set the hour.

3 Press ENTER/NEXT.
The minutes indication flashes.

4 Press TUNING +/– to set the minutes.

5 Press ENTER/NEXT.
The clock starts.

Tip

If you make a mistake, start over from step 1.

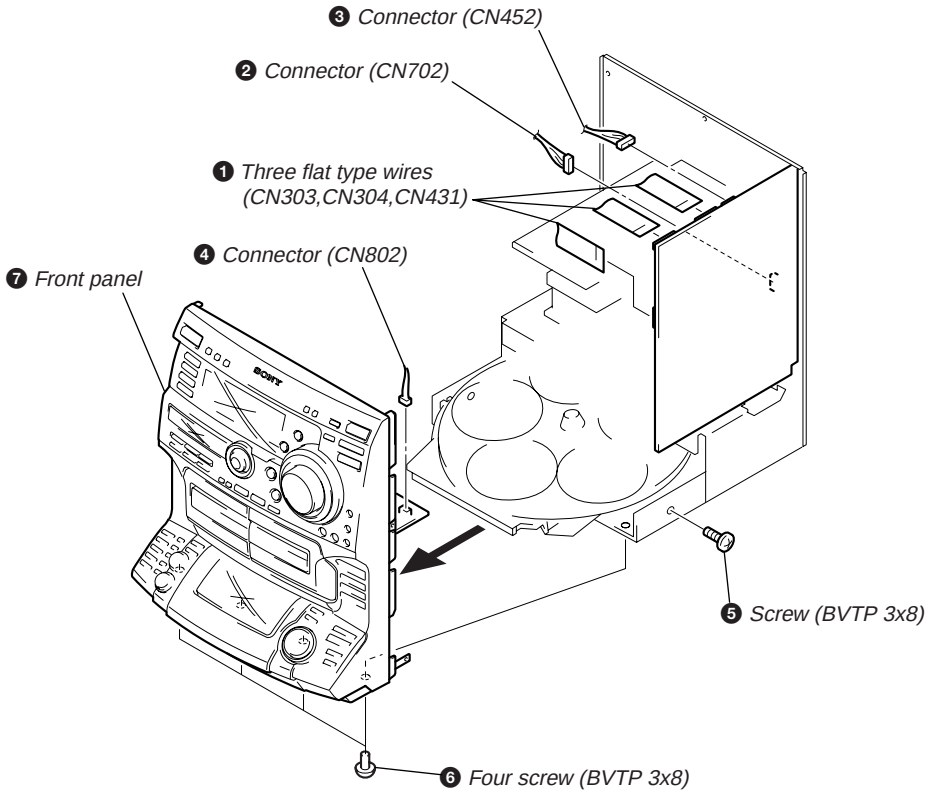
Note

The clock setting is canceled when you disconnect the power cord or if a power failure occurs.

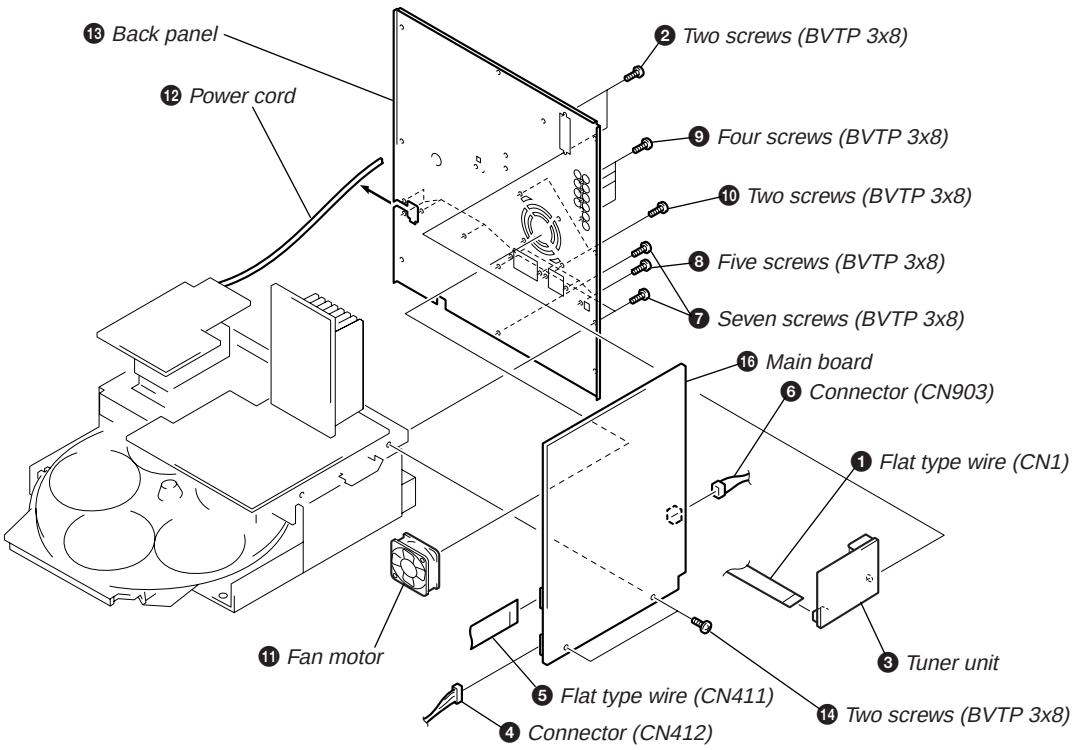
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

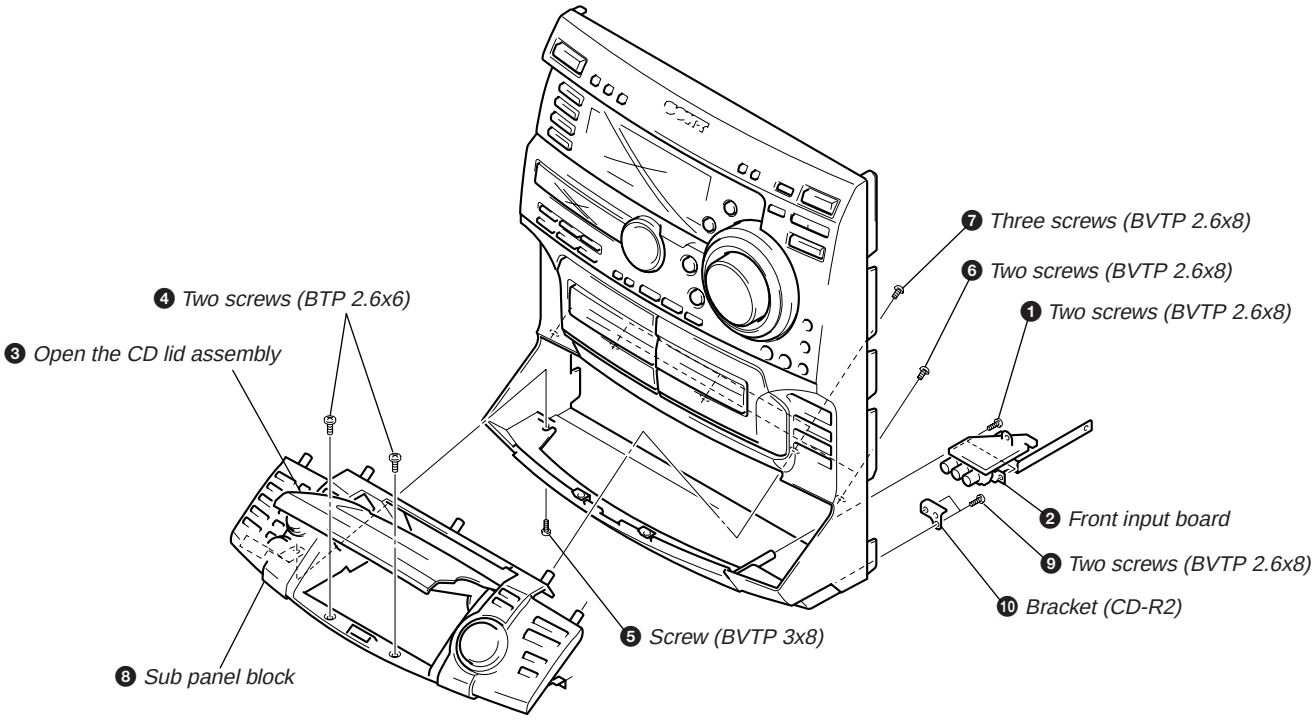
2-1. FRONT PANEL



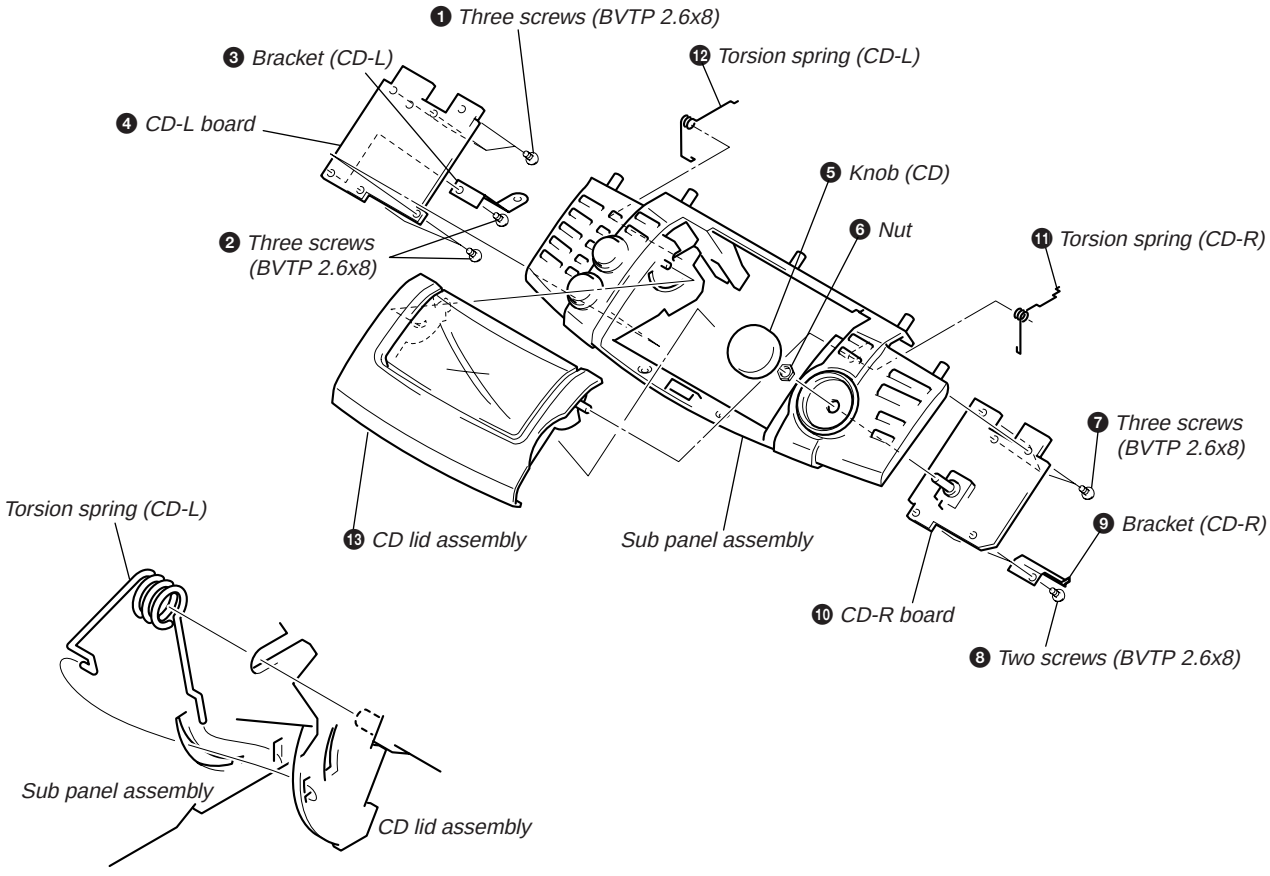
2-2. MAIN BOARD


⓭ Back panel
⓬ Power cord
❷ Two screws (BVTP 3x8)
❾ Four screws (BVTP 3x8)
❿ Two screws (BVTP 3x8)
❽ Five screws (BVTP 3x8)
❼ Seven screws (BVTP 3x8)
⓰ Main board
❻ Connector (CN903)
❶ Flat type wire (CN1)
❸ Tuner unit
⓫ Fan motor
❺ Flat type wire (CN411)
❹ Connector (CN412)
⓮ Two screws (BVTP 3x8)

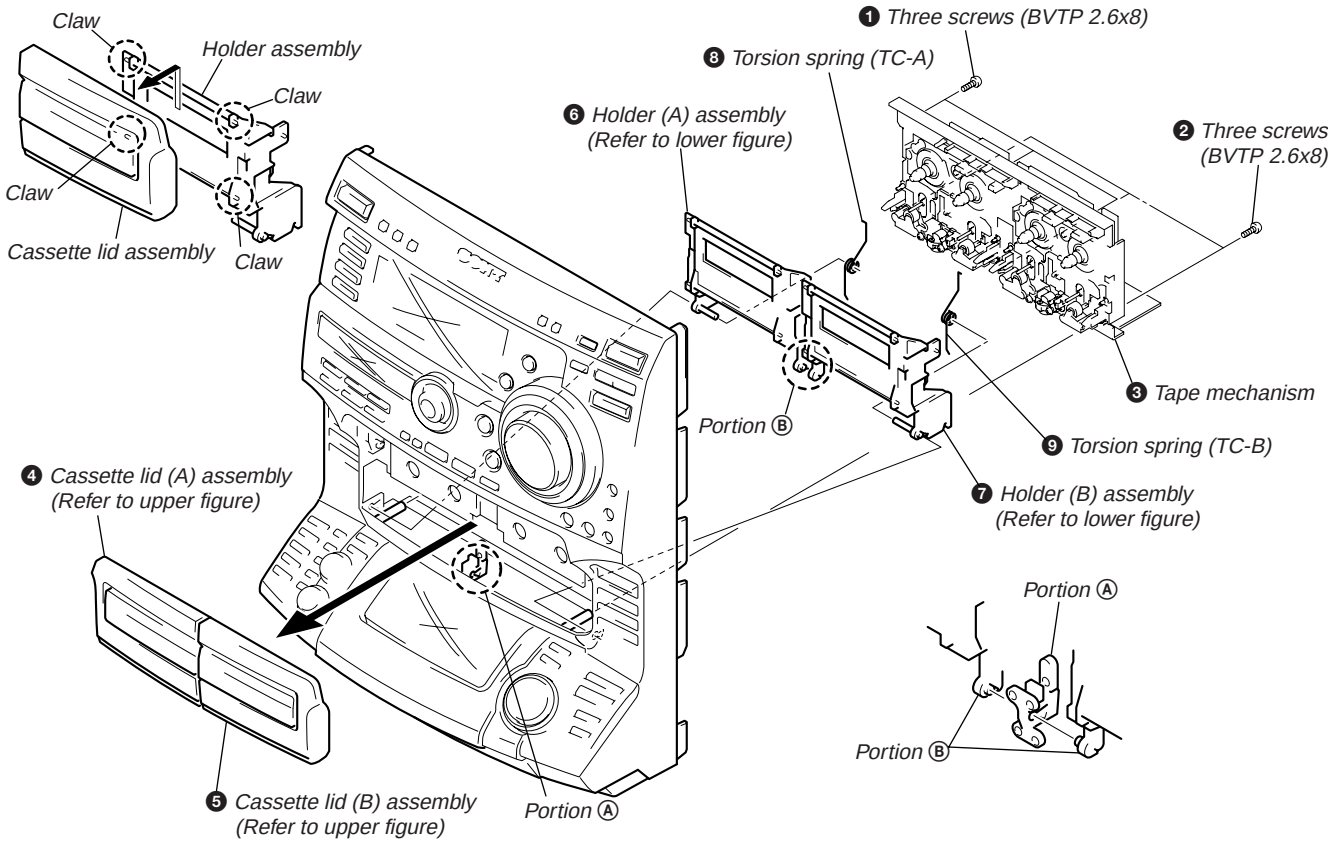
2-3. SUB PANEL


❼ Three screws (BVTP 2.6x8)
❻ Two screws (BVTP 2.6x8)
❶ Two screws (BVTP 2.6x8)
❹ Two screws (BTP 2.6x6)
❸ Open the CD lid assembly
❷ Front input board
❾ Two screws (BVTP 2.6x8)
❿ Bracket (CD-R2)
❺ Screw (BVTP 3x8)
❽ Sub panel block

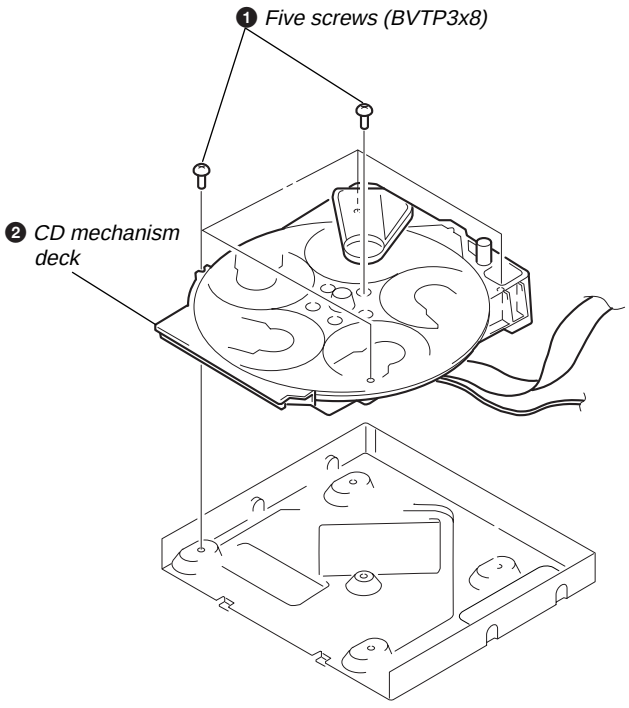
2-4. CD-L/CD-R BOARD AND CD LID ASSEMBLY



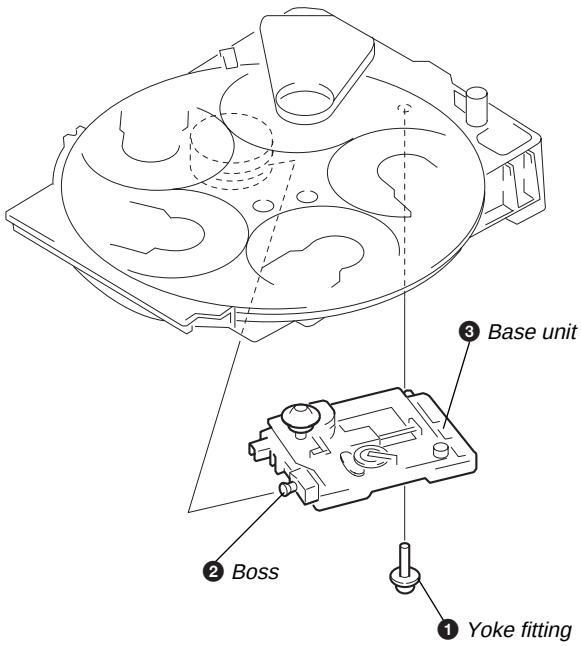
2-5. TAPE MECHANISM DECK AND CASSETTE LID



2-6. CD MECHANISM DECK

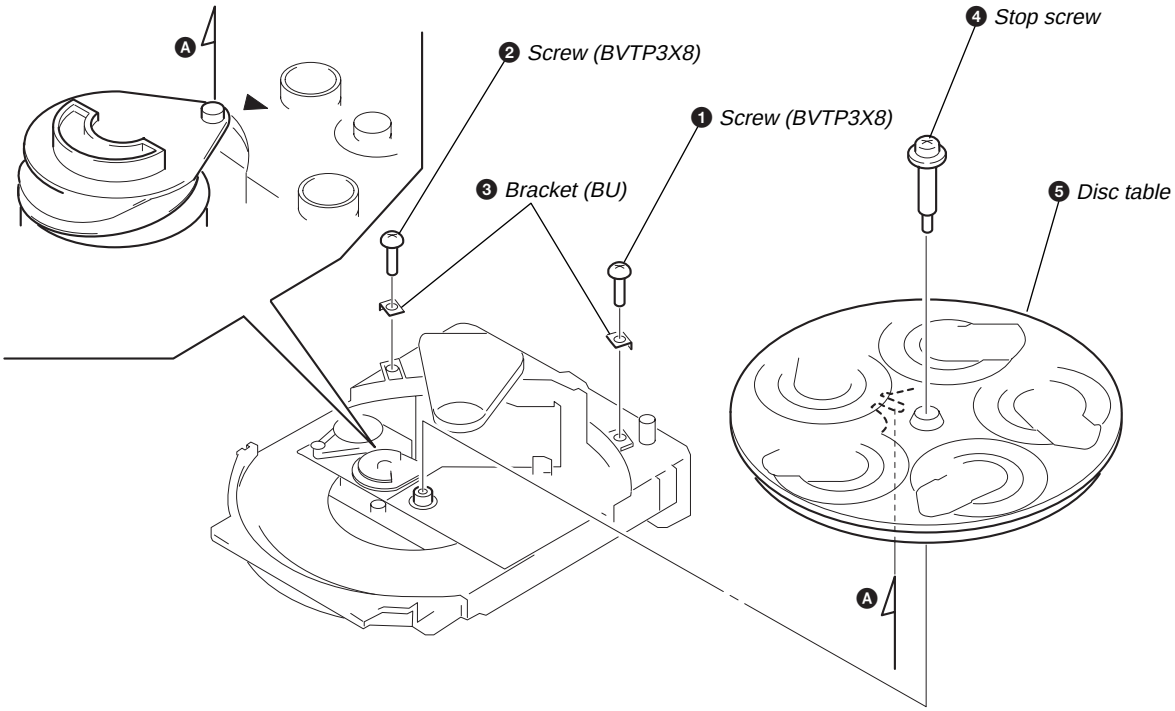


2-7. BASE UNIT



2-8. DISC TABLE

Note:
When the disc table is installed, adjust the positions of roller cam and mark ▶ as shown in the figure, then set to the groove of disc table.



SECTION 3
SERVICE MODE

About CD-TEXT display

This unit is provided with a simple CD-TEXT display function.
The CD-TEXT contents of 20 tracks are displayed on the fluorescent display tube.
Since the function is simple, some special characters may not be displayed, or may be displayed as other characters.

MC Cold Reset

• The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press three buttons [⏲/CLOCK SET], [ENTER], and [I/⏻] simultaneously.
2. "COLD RESET" is displayed on the fluorescent display tube and reset is executed.

CD Delivery Mode

• This mode moves the pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Press [LOOP] button and [I/⏻] button simultaneously.
3. Press the [I/⏻] button again to turn the set OFF.
4. A message "LOCK" is displayed on the fluorescent indicator tube, and the CD delivery mode is set.

MC Hot Reset

• This mode resets the set with the preset data kept stored in the memory. The hot reset mode functions same as if the power cord is plugged in and out.

Procedure:

1. Press three buttons [⏲/CLOCK SET], [ENTER], and [DISC 1] simultaneously.
2. The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

Sled Servo Mode

• This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the pick-up.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Press three buttons [⏲/CLOCK SET], [ENTER], and [DISC 5] simultaneously.
3. The Sled Servo mode is selected, if "CD" is blanking on the fluorescent indicator tube.
4. With the CD in stop status, When [▶▶] button is pressed, the pick-up moves outside. When [◀◀] button is pressed, the pick-up moves inside.
5. To exit from this mode, perform as follows:
   1) Move the pick-up to the most inside track.
   2) Execute MC cold reset. (Press the three buttons [⏲/CLOCK SET], [ENTER], and [I/⏻] button simultaneously.)

Note:

• Always move the pick-up to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
• Do not run the sled motor excessively, otherwise the gear can be chipped.

Change-over of AM Tuner Step between 9kHz and 10kHz

• A step of AM channels can be changed over between 9kHz and 10kHz.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Select the function "TUNER", and press [TUNER/BAND] button to select the BAND "AM".
3. Press [I/⏻] button to turn the set OFF.
4. Press [ENTER] and [I/⏻] buttons simultaneously, and the display of fluorescent indicator tube changes to "AM 9k STEP" or "AM 10k STEP", and thus the channel step is changed over.

LED and Fluorescent Indicator Tube All Lit, Key Check Mode

Procedure:

1. Press three buttons [⏲/CLOCK SET], [ENTER], and [DISC 2] simultaneously.
2. LEDs and fluorescent indicator tube are all turned on.
   Press [DISC 2] button, and the key check mode is activated.
3. In the key check mode, the fluorescent indicator tube displays "K0 V0 J0". Each time a button is pressed, "K" value increases. However, once a button is pressed, it is no longer taken into account.
   "J" Value increases like 1, 2, 3 ... if rotating [I◀◀ AMS ▶▶I] knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "-" direction.
   "V" Value increases like 1, 2, 3 ... if rotating [VOLUME] knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "-" direction.
4. To exit from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

AMS Test Mode

• This mode is used for checking the AMS operations of the tape deck.

JIG
7-819-039-12 Alignment tape, AMS-110A

Procedure:

1. Press the I/⏻ button to turn the set ON.
2. Set the tape (AMS-110A).
3. Press the three buttons ⏲/CLOCK SET , ENTER , and DISC 3 button simultaneously.
4. "TEST MODE" is displayed on the fluorescent display tube. At the same time, the VOLUME indicator blinks.
5. Press the FUNCTION button and switch the function to the deck with the tape (AMS-110A).
6. Press the CD SYNCHRO button. "AMS CHECK" is displayed on the fluorescent display tube and the tape is rewound.
7. AMS starts in the normal direction. If the AMS count is 2 at shut down, proceed to step 8.
   "NG" is displayed at other times, and the deck stops.
8. AMS starts in the opposite direction. If the AMS count is 2 at shut down again, "OK" is displayed.
   "NG" is displayed at other times.

Aging Mode

During the aging mode, both the CD player and tape deck are executed together.

• If an error occurs:

Aging stops, and the error state is displayed on the fluorescent display tube.

• If no error occurs:

Aging is repeated.

Procedure:

1. Press the I/⏻ button to turn the set ON.
2. Load 10 minute tapes with unbent rec-proof tabs in decks A and B.
3. Set CDs on the DISC 1 and DISC 4 tables.
4. Set the CD mode REPEAT to OFF and PLAY MODE to ALL DISCS.
   (Press the PLAY MODE and REPEAT buttons to set these modes.)
5. Press the FUNCTION button to switch the function to "CD".
6. Press the three buttons ⏲/CLOCK SET , ENTER , and DISC 4 button simultaneously.
7. Aging starts.
8. To end aging, press the I/⏻ button to turn the set OFF.

Aging Sequence:

Aging is performed in the following sequence.

• Tape Deck

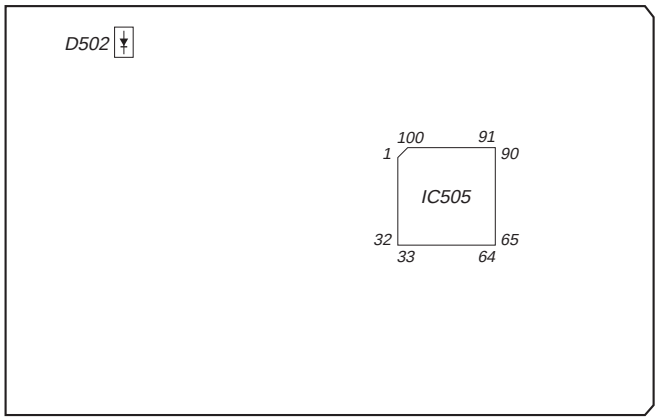
1. The tape in deck A is rewound. "TAPE A AG-1" is displayed.
2. The FWD side of deck A is played for two minutes.
   "TAPE A AG-2" is displayed.
3. The tape in deck A is fast forwarded. "TAPE A AG-3" is displayed. Fast forward is carried out for 20 seconds or to the tape end.
4. The RVS side of deck A is played for two minutes.
   "TAPE A AG-4" is displayed.
5. The tape in deck A is rewound. "TAPE A AG-5" is displayed.
6. The FWD side of deck B is played for two minutes.
   "TAPE B AG-2" is displayed.
7. The tape in deck B is fast forwarded. "TAPE B AG-3" is displayed. Fast forward is carried out for 20 seconds or to the tape end.
8. The RVS side of deck B is played for two minutes.
   "TAPE B AG-4" is displayed.
9. The tape in deck A is rewound. "TAPE A AG-5" is displayed.
10. Repeated from step 2.

SELF-DIAGNOSIS

This model has the self-diagnosis function for the VIDEO and AUDIO decoder sections.
Immediately after the power on, the self-diagnosis function searches each operation of IC's around the mechanism control microcomputer (IC701).
The results can be checked by D502 of the VIDEO board.

- When D502 turns on the IC is normal.
- When D502 flashes twice, the MPEG decoder (IC505) is abnormal.
- When D502 flashes three times, the MPEG decoder (IC505) or the DRAM (IC507) is abnormal.

[VIDEO BOARD] (SIDE A)

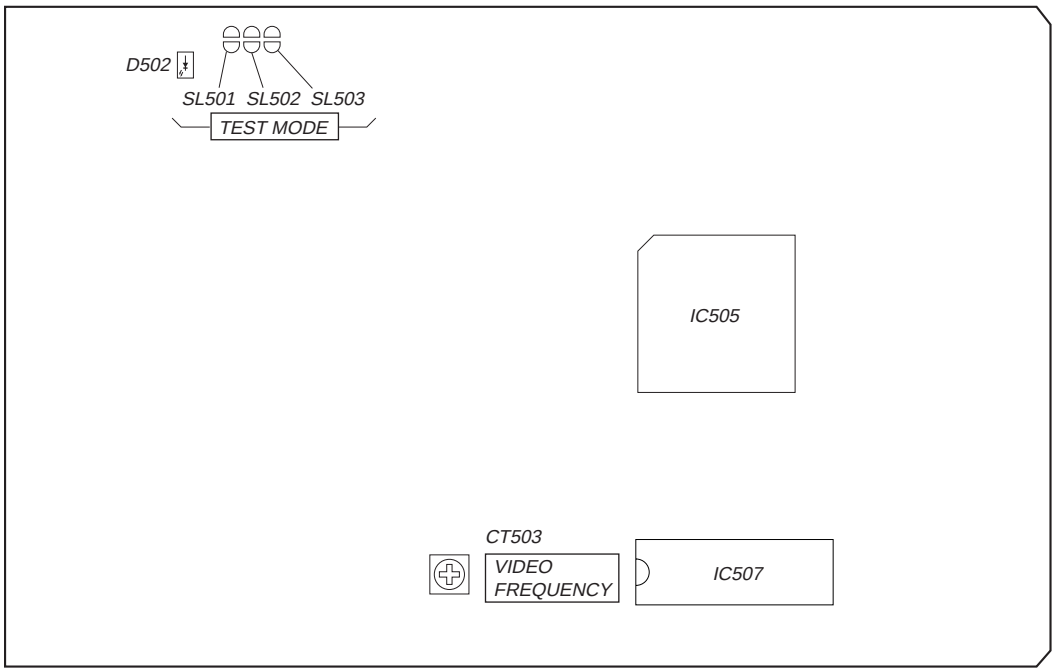


[VIDEO CD COLOR-BARS MODE]

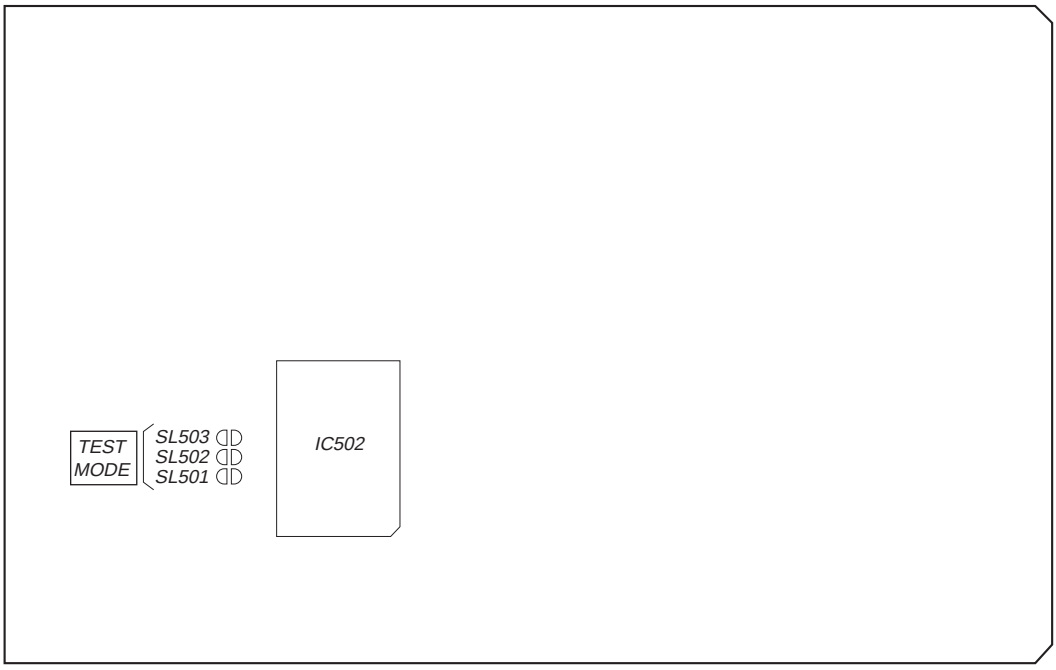
On this mode, the data of the color-bars signal as a picture signal and the 1kHz sine wave signal as a sound signal are output by the mechanism control microcomputer (IC502) for video CD signal check. When measurement of the voltage and waveform on the VIDEO board, perform it in this mode.
For refernce, the color-bars signal can be observed at J302 (VIDEO OUT) and the sound signal can be observed at J101 (VIDEO/MD (AUDIO) OUT) using an oscilloscope.

1. Connect the lead wire to both ends of the land of SL503 of the VIDEO board.
2. Turn the power on. Press FUNCTION button to select CD.
3. After 2 or 3 seconds later, connect the lead wire.
4. After measuring, remove the lead wire connected.

[VIDEO BOARD] (SIDE A)



[VIDEO BOARD] (SIDE B)



SECTION 4
MECHANICAL ADJUSTMENTS

Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback heads — pinch rollers
   erase head — rubber belts
   capstan — idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	31 to 71 g • cm (0.43 – 0.98 oz • inch)
FWD back tension	CQ-102C	2 to 6 g • cm (0.02 – 0.08 oz • inch)
REV	CQ-102RC	31 to 71 g • cm (0.43 – 0.98 oz • inch)
REV back tension	CQ-102RC	2 to 6 g • cm (0.02 – 0.08 oz • inch)
FF/REW	CQ-201B	71 to 143 g • cm (0.98 – 1.99 oz • inch)
FWD tension	CQ-403A	100 g or more (3.53 oz or more)
REV tension	CQ-403R	100 g or more (3.53 oz or more)

SECTION 5
ELECTRICAL ADJUSTMENTS

DECK SECTION **0 dB=0.775V**

1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

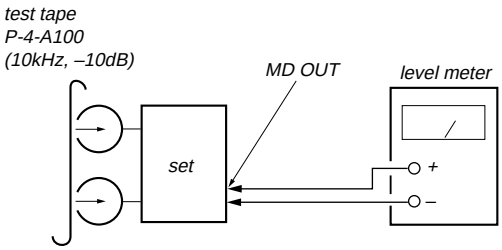
Tape	Signal	Used for
P-4-A100	10 kHz, –10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Level Adjustment

Record/Playback Head Azimuth Adjustment (Deck A, Deck B)

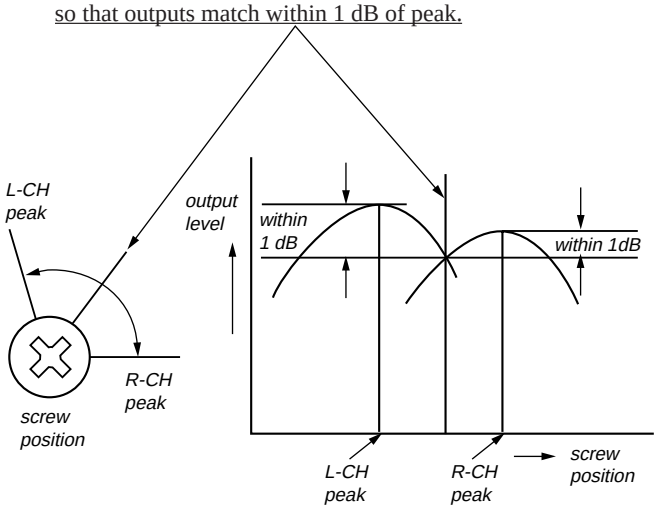
Note: Perform this adjustments for both decks.

Procedure:

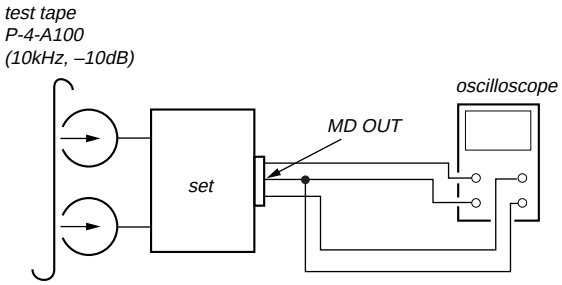
1. Mode : Playback

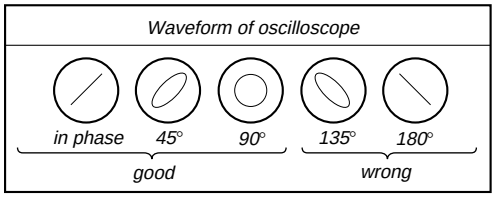


2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of peak.



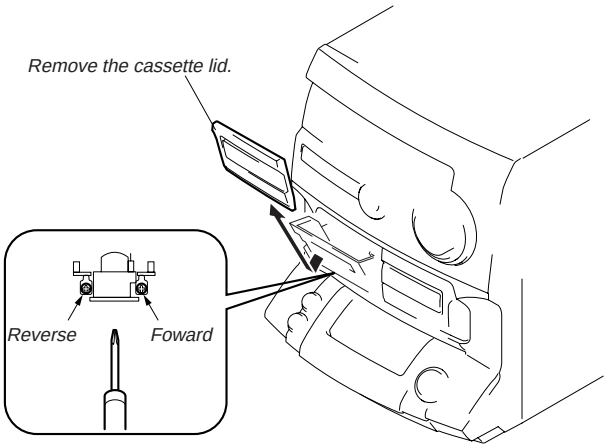
3. Mode: Playback





4. After the adjustments, apply suitable locking compound to the parts adjusted.

Adjustment Location: Playback Head (Deck A)
Record/Playback/Erase Head (Deck B)



Tape Speed Adjustment (Deck A)

Note: Set the test mode using the following method and begin tape speed adjustment.
In the test mode, the speed will switch to double speed or normal speed each time the HI-SPEED DUB button is pressed.

Procedure:
With the power turned ON, press the ⏲/CLOCK SET button, ENTER button, and DISC 3 button simultaneously.
(The "VOLUME" on the fluorescent display tube will blink while in the test mode.)
To exit the test mode, press the I/⏻ button.

1. Insert the WS-48B into deck B.
2. Press the ▷ button of deck B.
3. Press the HI-SPEED DUB button and play the tape at double speed.
4. Adjust RV1001 of the LEAF SW board so that the reading of the frequency counter becomes 6000 ± 180 Hz.
5. Press the HI-SPEED DUB button and play the tape at normal speed.
6. Adjust RV1002 of the LEAF SW board so that the reading of the frequency counter becomes 3000 ± 90 Hz.

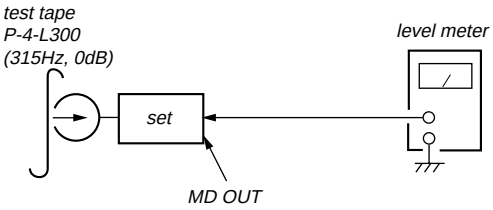
Adjustment Location: LEAF SW board

Sample Value of Wow and flutter

W.RMS (JIS) less than 0.3%
(test tape: WS-48B)

Playback Level Adjustment (Deck A, Deck B)

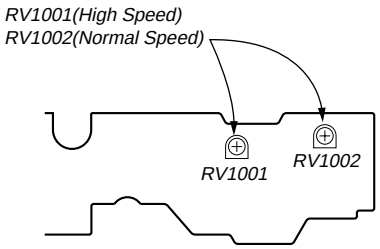
Procedure:
Mode: Playback



Deck A is RV311 (L-CH) and RV411 (R-CH), deck B is RV301 (L-CH) and RV401 (R-CH)
so that adjustment within the following adjustment level.

Adjustment level:
CN301 playback level: 301.5 to 338.3 mV (–8.2 to –7.2 dB)
level difference between the channels: within ± 0.5 dB
Adjustment Location: AUDIO board

Adjustment Location
[LEAF SW BOARD] (Conductor Side)



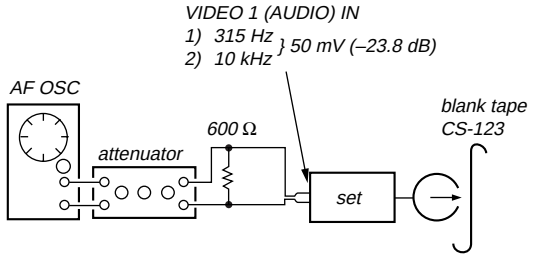
Record Bias Adjustment (Deck B)

Procedure:

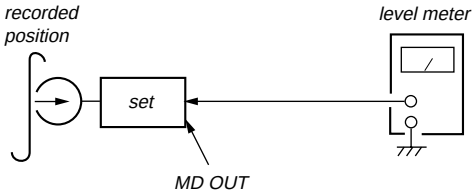
INTRODUCTION

When set to the test mode performed in **Tape Speed Adjustment**, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO 1.
(After recording, press the ◀◀ button without stopping will return to the position where recording was started.)

1. Press FUNCTION button to select VIDEO 1. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B, press the ● REC button, and then press the ▷ button to start recording.
3. Mode: Record
4. Mode: Playback



5. Confirm playback the signal recorded in step 2 become



adjustment level as follows.
If these levels do not adjustment level, adjust the RV341 (L-CH) and RV441 (R-CH) on the AUDIO board to repeat steps 3 and 4.

Adjustment level: The playback output of 10 kHz level difference against 315 Hz reference should be ± 1.0 dB.

Adjustment Location: AUDIO board

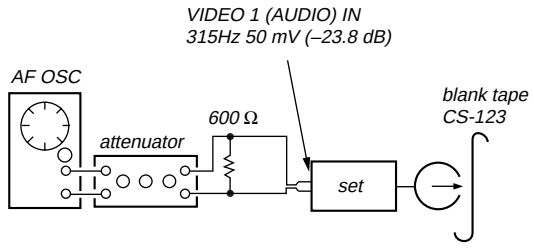
Record Level Adjustment (Deck B)

Procedure:

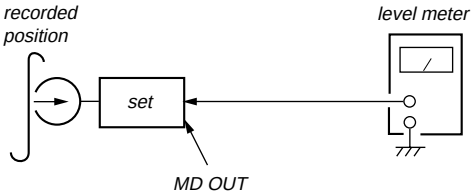
INTRODUCTION

When set to the test mode performed in **Tape Speed Adjustment**, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO 1.
(After recording, press the ◀◀ button without stopping will return to the position where recording was started.)

1. Press FUNCTION button to select VIDEO 1. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B, press the ● REC button, and then press the ▷ button to start recording.
3. Mode: Record
4. Mode: Playback



5. Confirm playback the signal recorded in step 2 become

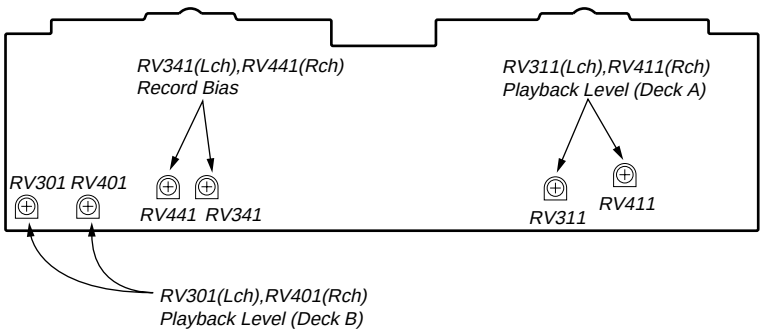


adjustment level as follows.
If these levels do not adjustment level, adjust the RV301 (L-CH) and RV351 (R-CH) on the MAIN board to repeat steps 3 and 4.

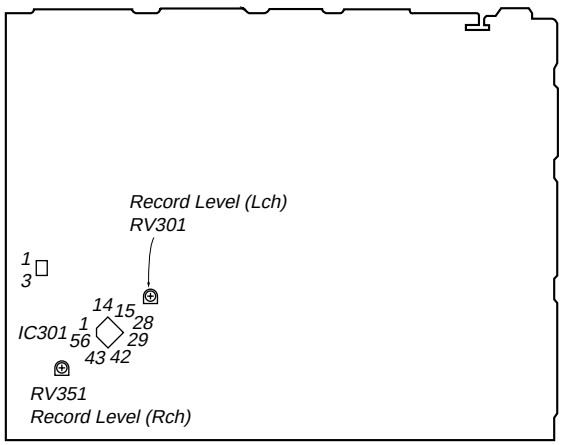
Adjustment level:
CN403 playback level: 47.2 to 53.0 mV (–24.3 to –23.3 dB)

Adjustment Location: MAIN board

Adjustment Location:
[AUDIO BOARD] (Conductor Side)



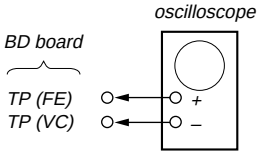
[MAIN BOARD] (Conductor Side)



CD SECTION

Note:
1. CD Block is basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

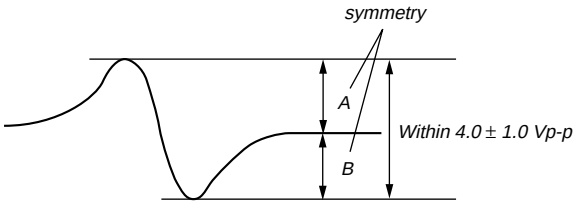
S Curve Check



Adjustment Location: BD board

Procedure :
1. Connect the oscilloscope to test points TP (FE) and TP (VC).
2. Connect TP (FEI) and GND, and TP (AGCCON) and GND of the BD board with lead wires.
3. Press the I/⏻ button to turn the set ON.
4. With the disc (YEDS-18) loaded, press the ▶II button and perform focus search. (Focus search will be performed in the same way even while the disc table is pushed in and out.)
5. Check the symmetry and peak to peak level of the oscilloscope waveform (S curve) at this time.

S-curve waveform

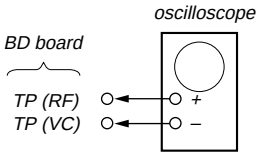


6. After check, remove the lead wire connected in step 2.

Note: • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

Adjustment Location: BD board

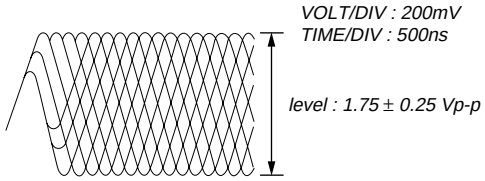
RF Level Check



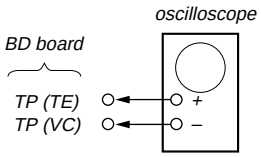
Procedure :
1. Connect oscilloscope to test point TP (RF) and TP (VC) on BD board.
2. Connect TP (AGCCON) and GND of the BD board with lead wires.
3. Press the I/⏻ button to turn the set ON.
4. Put disc (YEDS-18) in and playback 5track.
5. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.
6. After check, remove the lead wire connected in step 2.

Note: Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

RF signal waveform



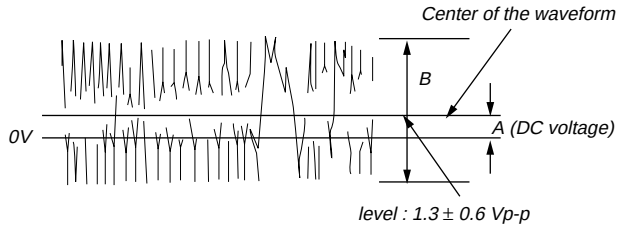
E-F Balance (Traverse) Check



Adjustment Location: BD board

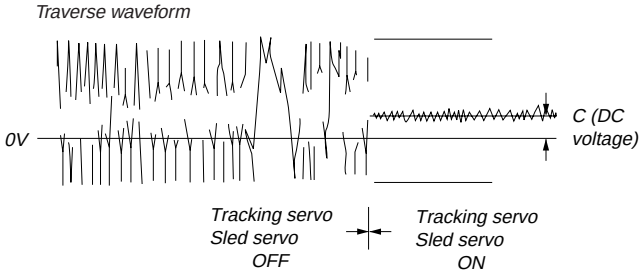
Procedure :
1. Connect oscilloscpe to test point TP (TE) on BD board.
2. Short-circuit SL502 of the video board to GND.
3. Turned Power switch on. Press FUNCTION button to select CD.
4. Put disc (YEDS-18) in to play the number five track.
5. Press the PLAY MODE button. (The tracking servo and the sledding servo are turned OFF.)
6. Check the level B of the oscilliscope's waveform and the A (DC voltage) of the center of the Traverse waveform.
   Confirm the following :
   A/B x 100 = less than ± 22%

Traverse waveform



7. Press the PLAY MODE button. (The tracking servo and sledding servo are turned ON.) Confirm the C (DC voltage) is almost equal to the A (DC voltage) is step 7.

Traverse waveform

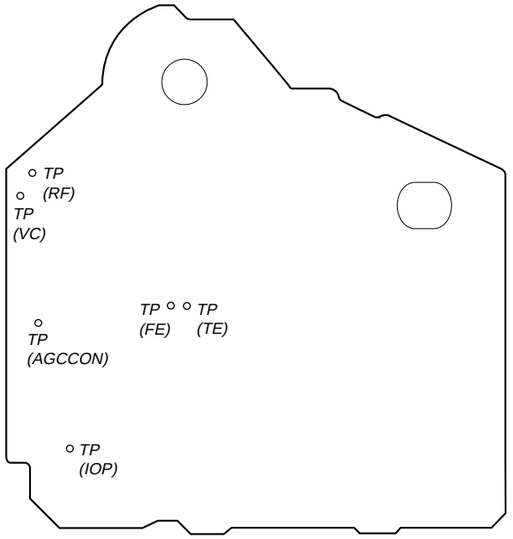


8. Desolder the short-land (SL502) short-circuited at step 2.

Adjustment Location: BD board

Adjustment Location :

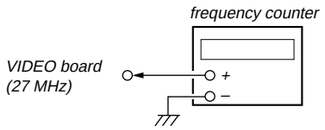
[BD BOARD] — SIDE B —



VIDEO SECTION

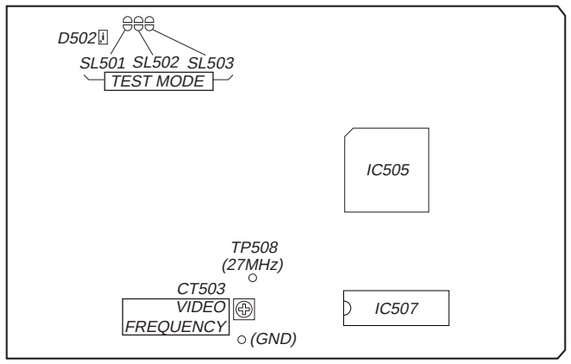
Frequency adjustment

1. Connect the frequency counter to check point TP508 (27MHz) of the VIDEO board.
2. Adjust CT503 of the VIDEO board so that the frequency counter read 27MHz ± 80Hz at STOP condition.

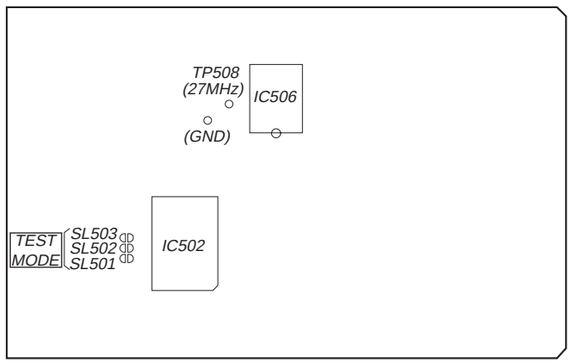


Adjustment Location :

[VIDEO BOARD] – SIDE A –

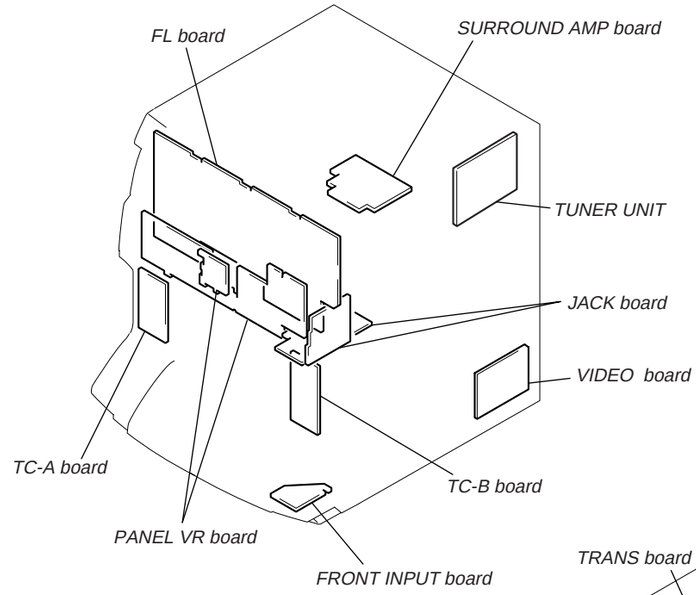


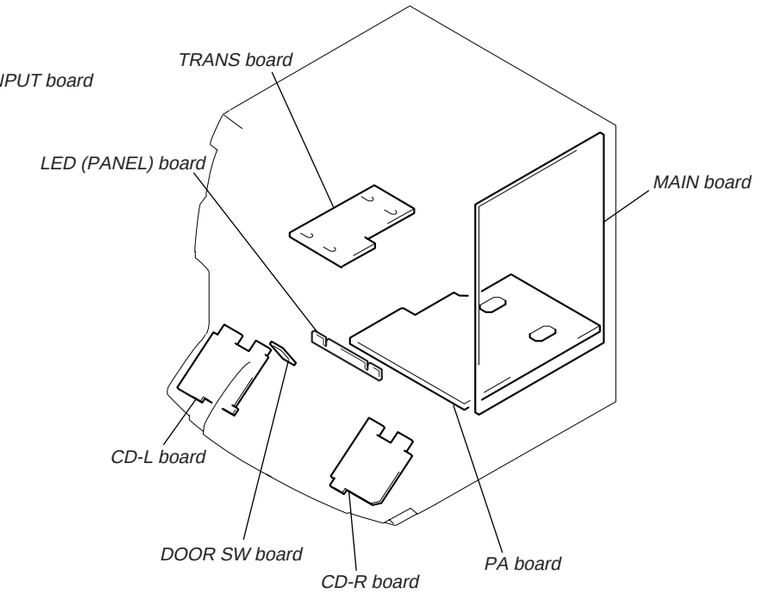
[VIDEO BOARD] – SIDE B –

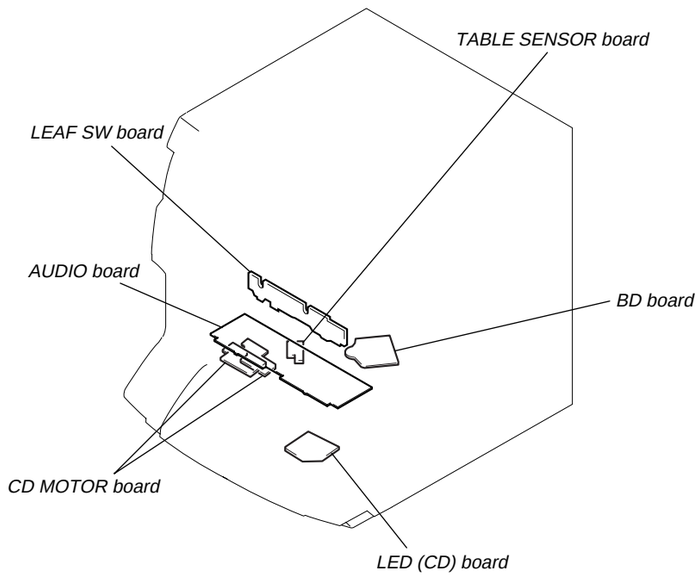


SECTION 6
DIAGRAMS

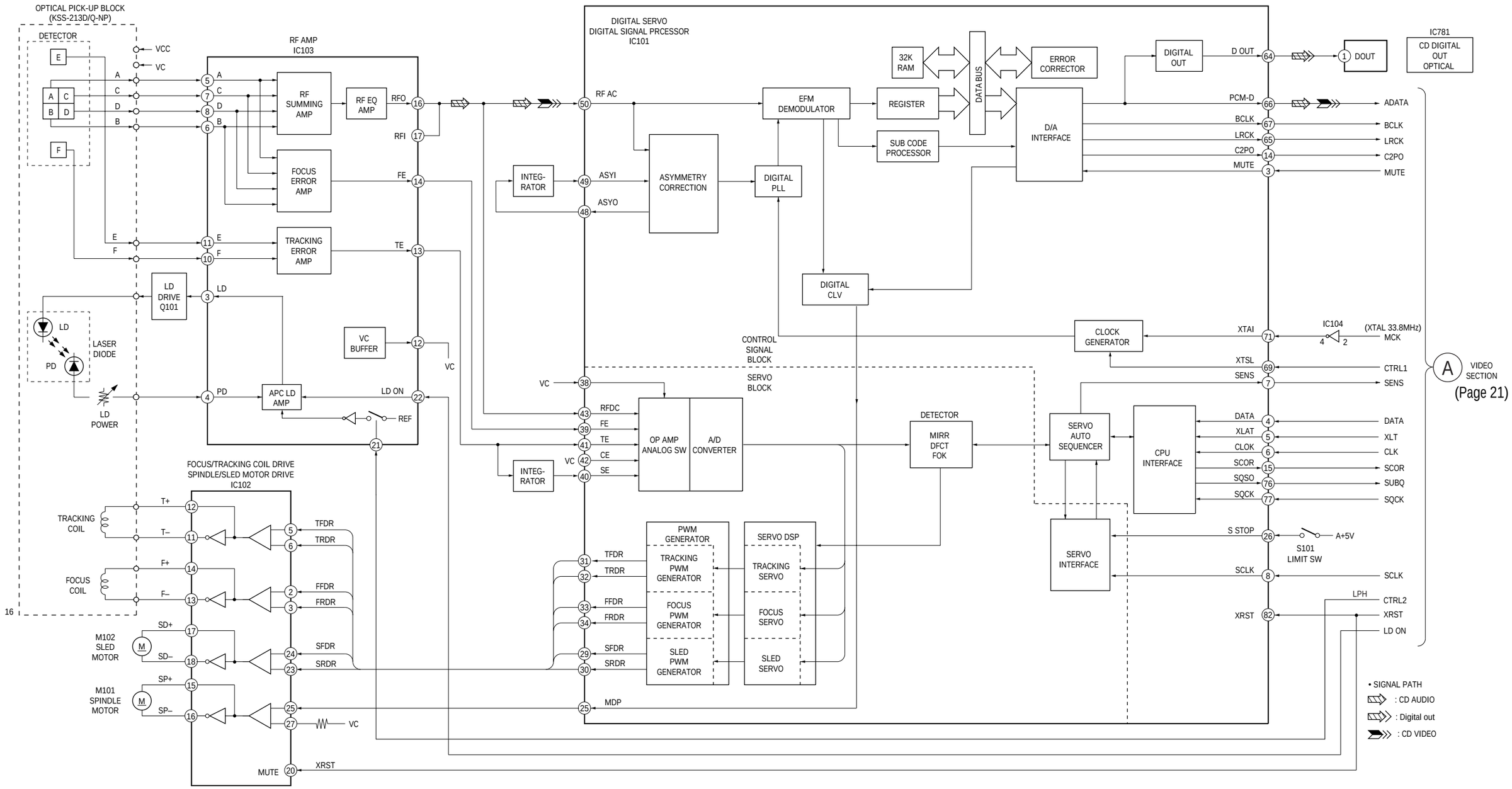
6-1. CIRCUIT BOARDS LOCATION



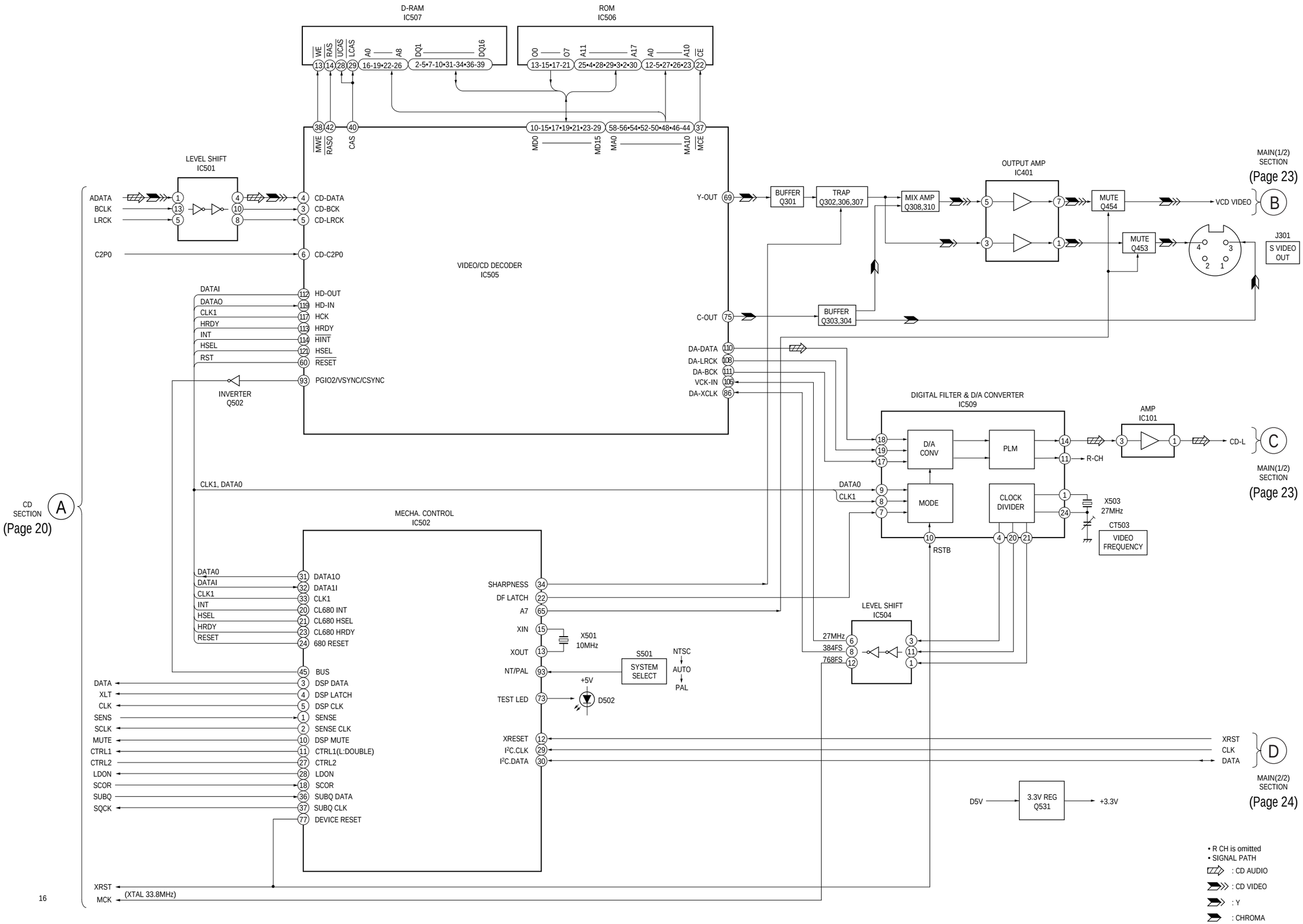




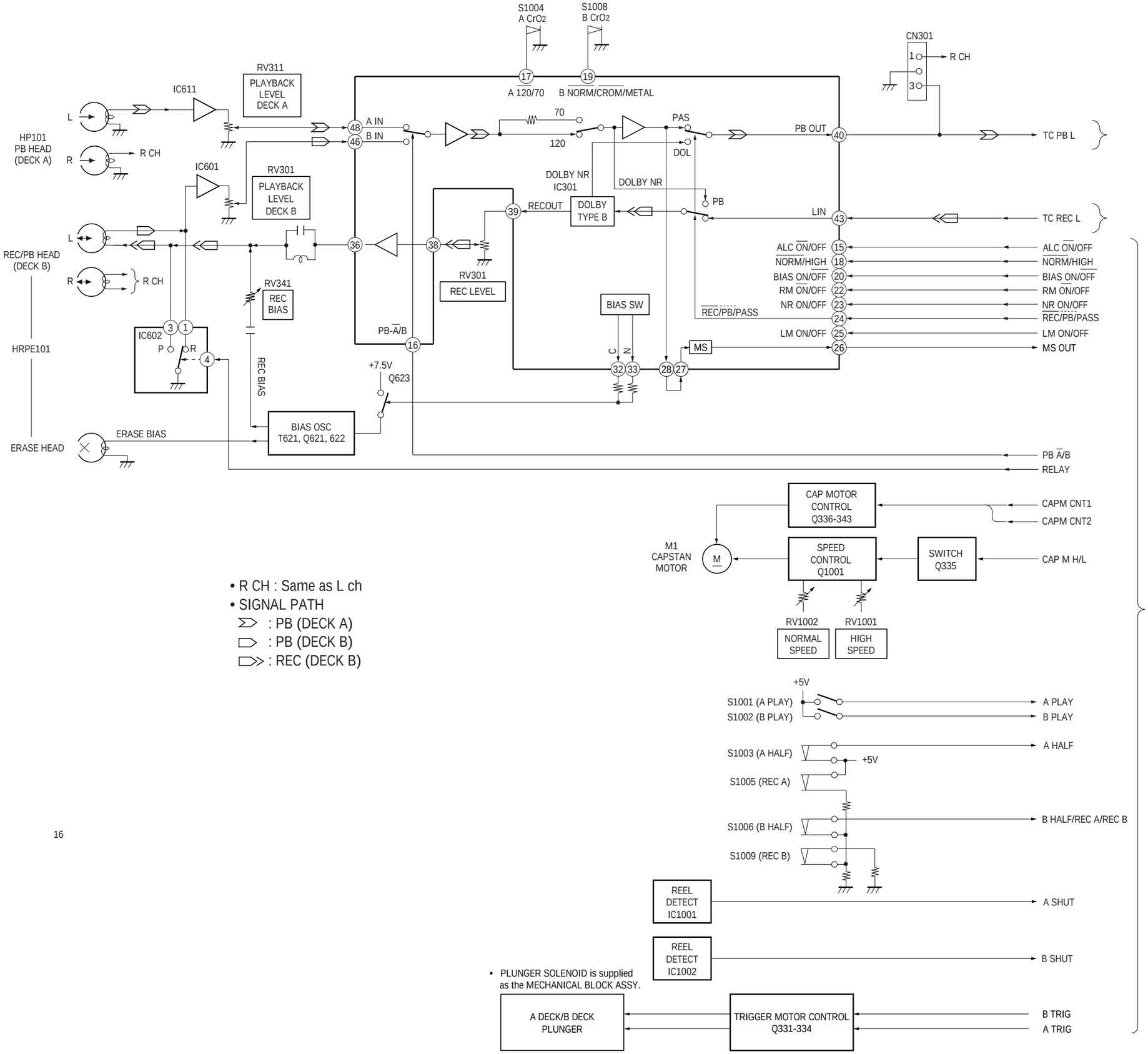
6-2. BLOCK DIAGRAMS
BD SECTION



VIDEO SECTION



DECK SECTION

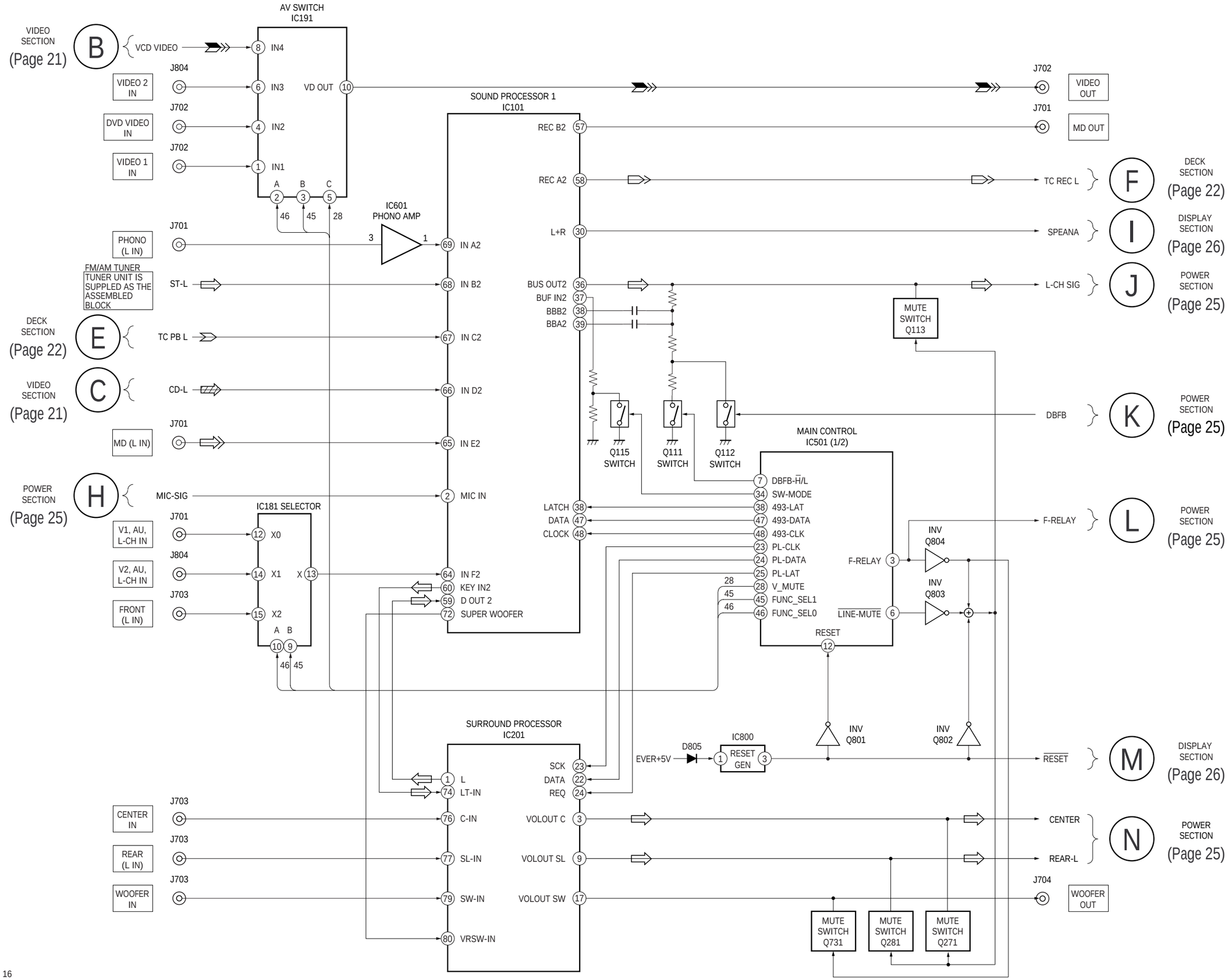


- R CH : Same as L ch
- SIGNAL PATH
  - : PB (DECK A)
  - : PB (DECK B)
  - : REC (DECK B)

- PLUNGER SOLENOID is supplied as the MECHANICAL BLOCK ASSY.

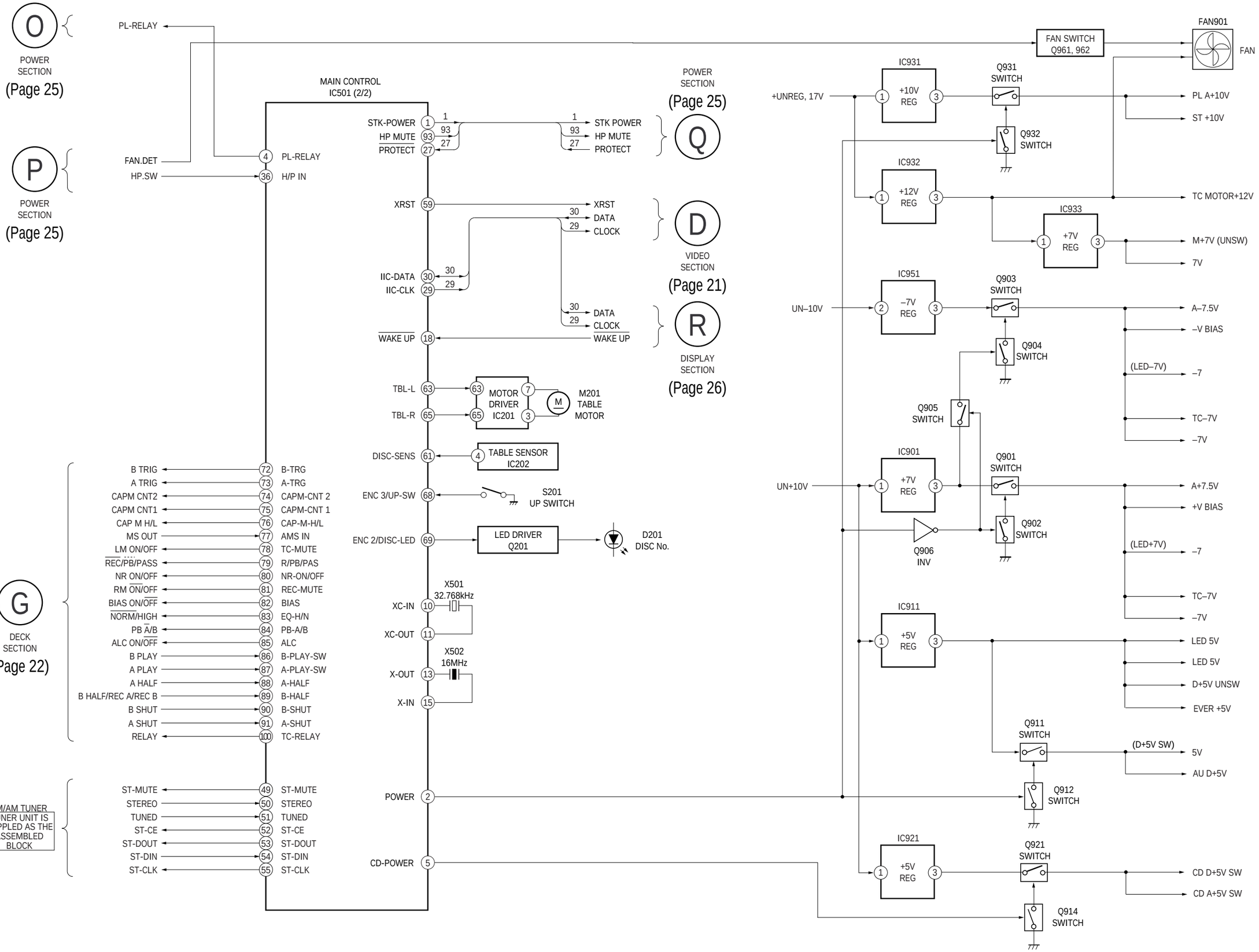
MAIN(1/2) SECTION (Page 23) E
F MAIN(1/2) SECTION (Page 23)
G MAIN(2/2) SECTION (Page 24)

MAIN (1/2) SECTION



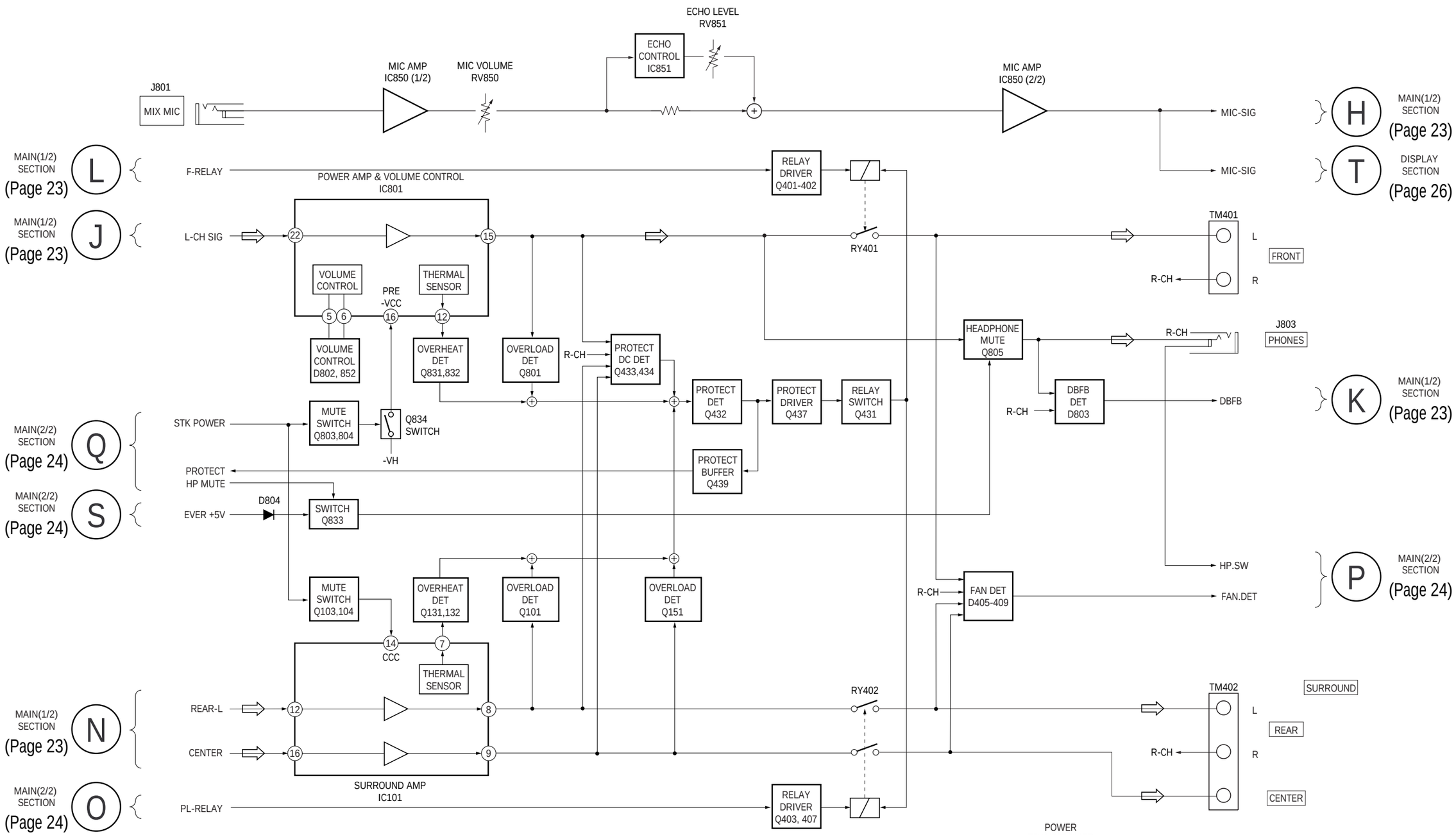
- R CH: Same as L ch
- SIGNAL PATH
  - : FM
  - : TC PB
  - : TC REC
  - : CD AUDIO
  - : CD VIDEO

MAIN (2/2) SECTION



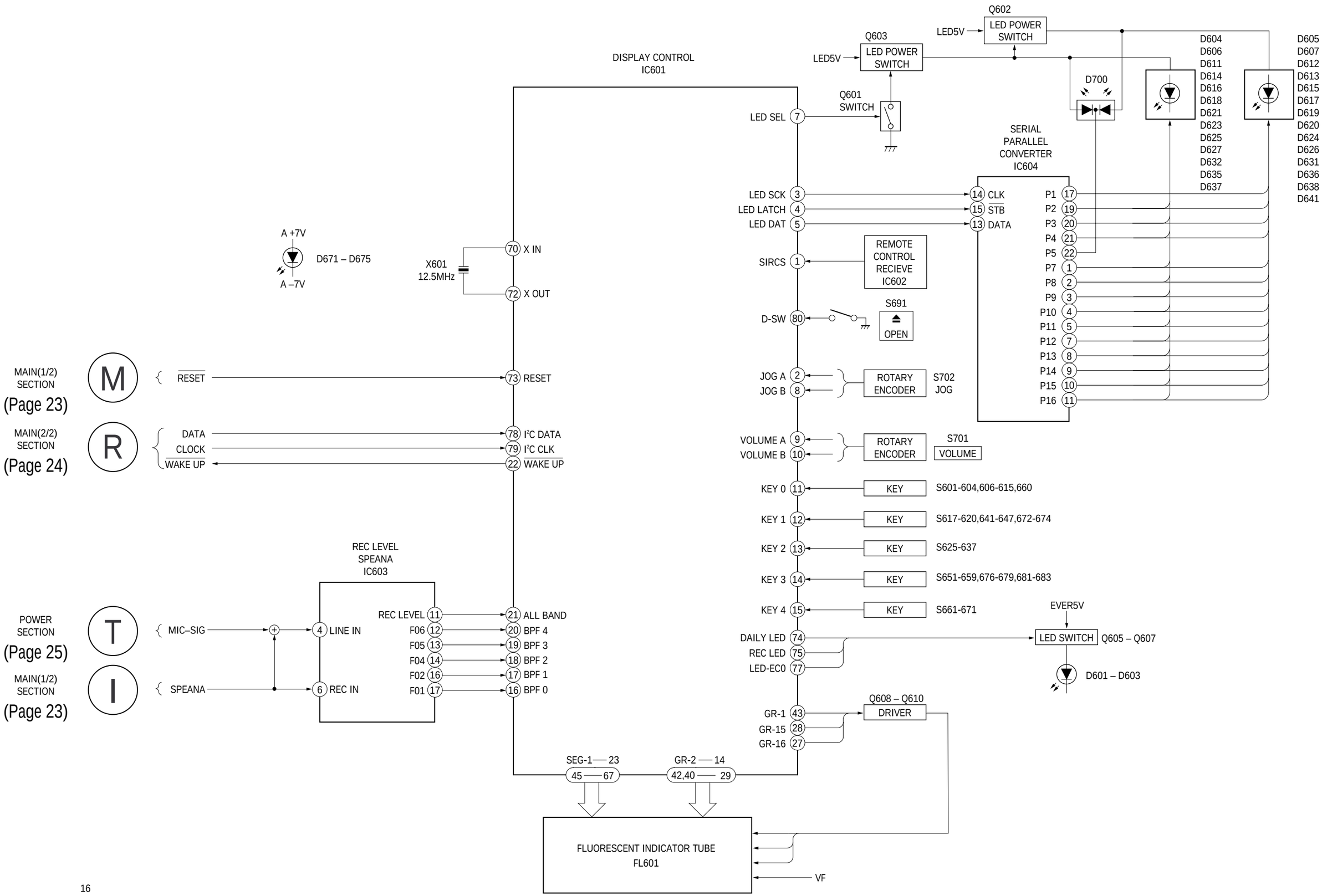
• R CH : Same as L ch

POWER SECTION



- R CH : Same as L ch
- SIGNAL PATH
  ⇨ : FM

DISPLAY SECTION



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B+ : B+ Line.
- B− : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - ⇨ : FM
  - ⇨ : VIDEO/MD
  - ⇨ : PB (DECK A)
  - ⇨ : PB (DECK B)
  - ⇨ : REC (DECK B)
  - ⇨ : CD
  - ⇨ : digital out
  - ⇨ : PHONO
  - ⇨ : CD VIDEO
  - ⇨ : Y
  - ⇨ : CHROMA
- Abbreviation
  - IA : Indonesia model
  - EA : Saudi Arabia model
  - MY : Malaysia model
  - SP : Singapore model
  - TH : Thai model

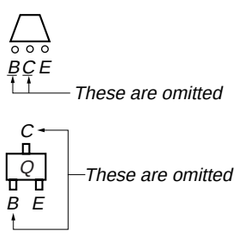
For printed wiring boards.

Note:

- ○——— : parts extracted from the component side.
- ○ : Through hole.
- △ : internal component.
- ▒▒ : Pattern from the side which enables seeing.

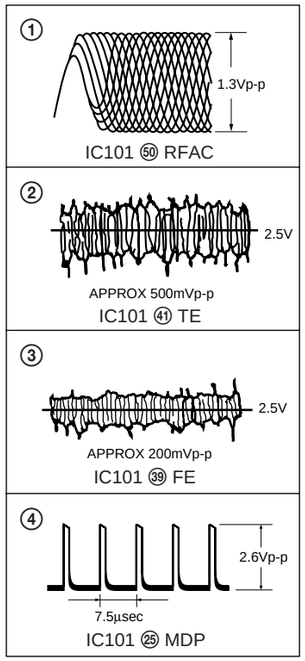
(The other layers' patterns are not indicated.)

- **Indication of transistor**

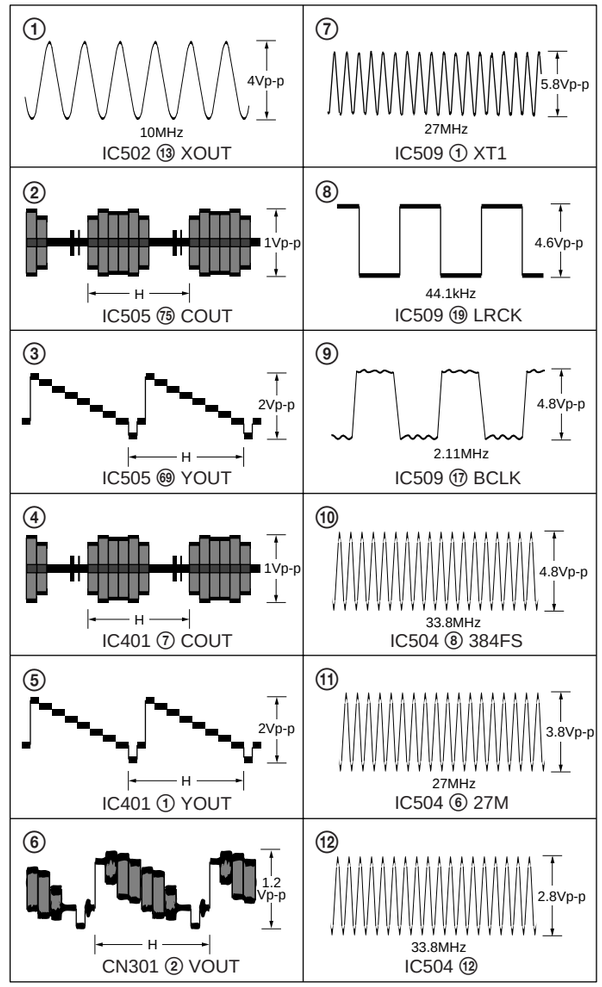


Waveforms

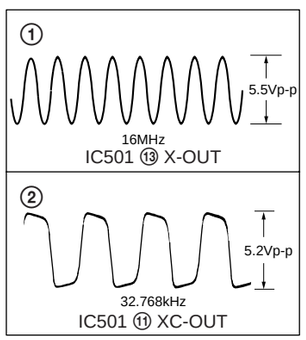
BD SECTION



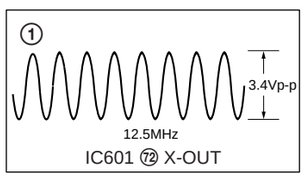
VIDEO SECTION



MAIN (2/5) Section

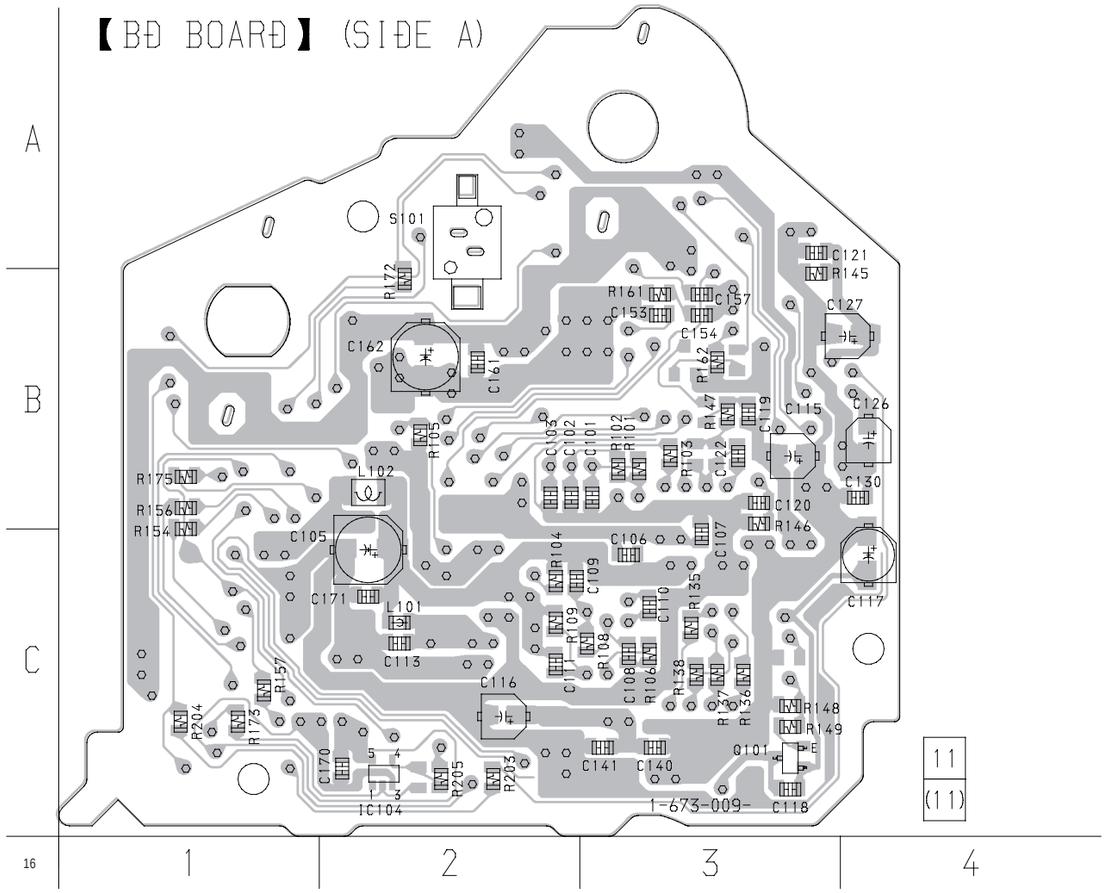


FL Section

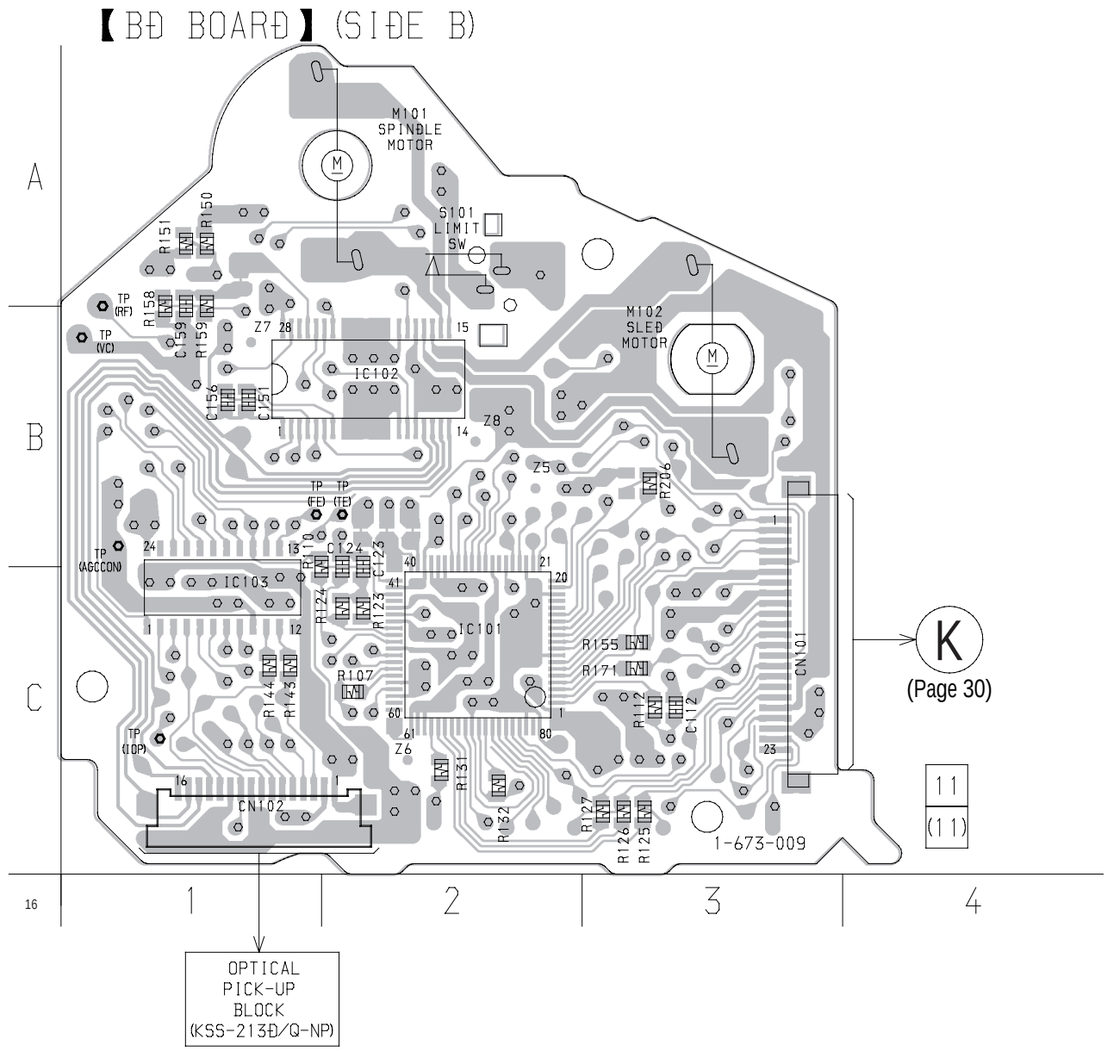


6-3. PRINTED WIRING BOARD BD SECTION • Refer to page 19 for Circuit Boards Location.

【BD BOARD】(SIDE A)

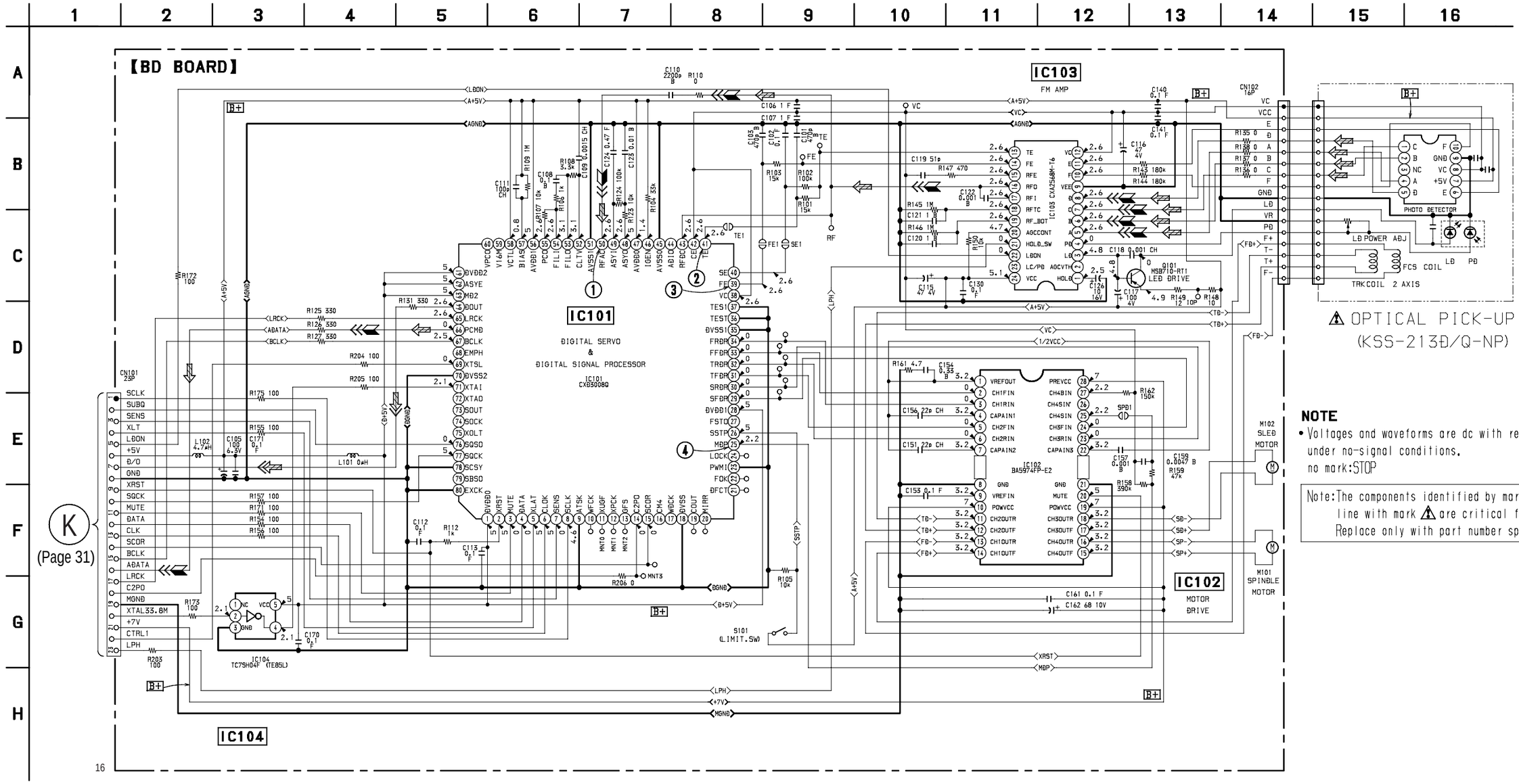


【BD BOARD】(SIDE B)



6-4. SCHEMATIC DIAGRAM BD SECTION

• Refer to page 27 for Waveforms.



NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:STOP

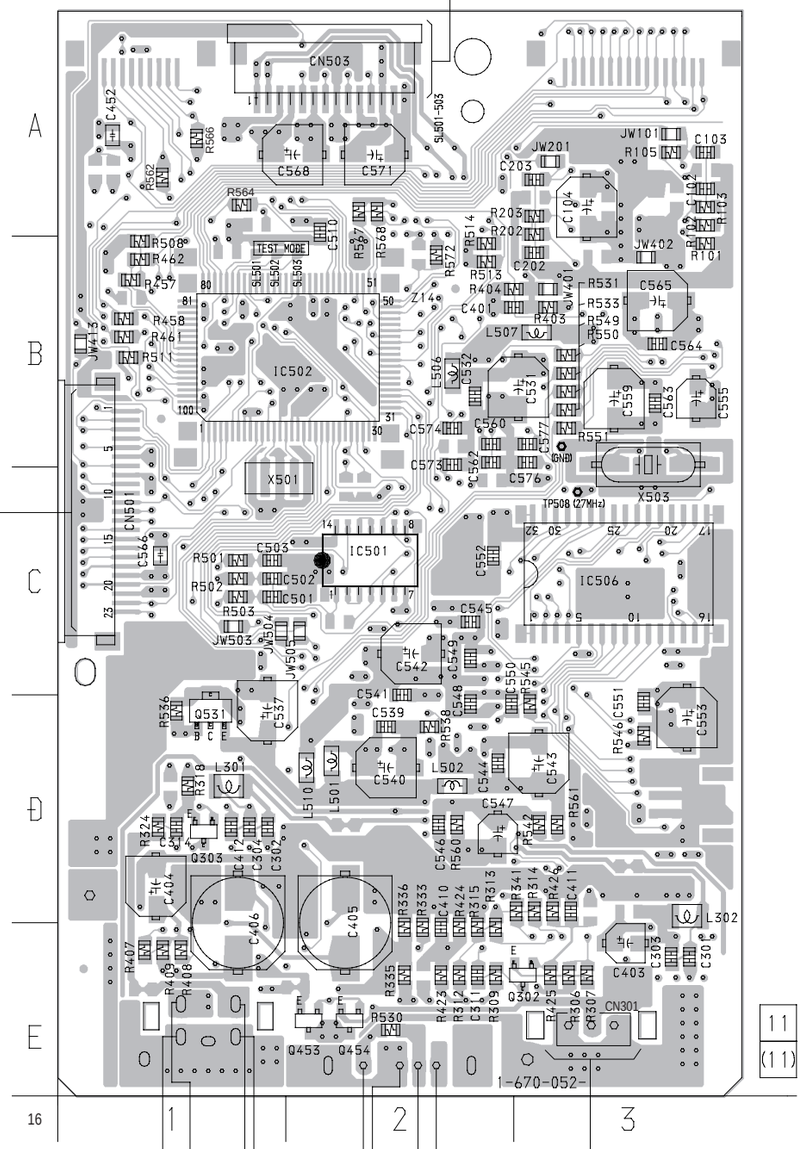
Note:The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

6-5. PRINTED WIRING BOARD VIDEO SECTION

• Refer to page 19 for Circuit Boards Location.

【VIÐEO BOARÐ】(SIÐE A)

【VIÐEO BOARÐ】(SIÐE B)



• **Semiconductor Location**

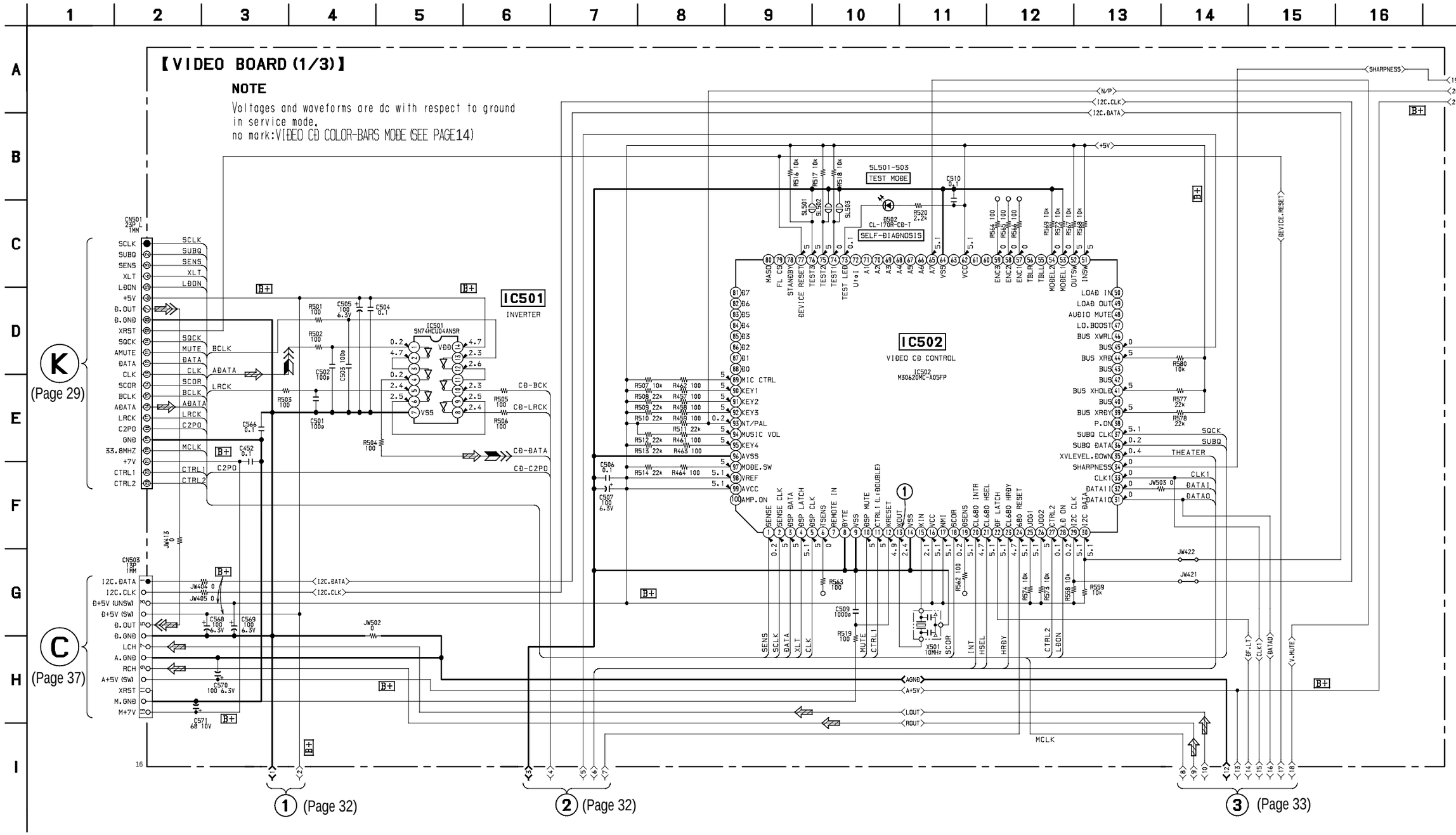
Ref. No.	Location
D301	E-1
D501	D-3
D502	A-3
IC101	A-1
IC401	E-3
IC504	A-1
IC505	C-2
IC507	C-1
IC509	B-1
Q301	E-1
Q304	D-3
Q306	E-1
Q307	E-2
Q308	E-2
Q310	E-2
Q502	D-3

• **Semiconductor Location**

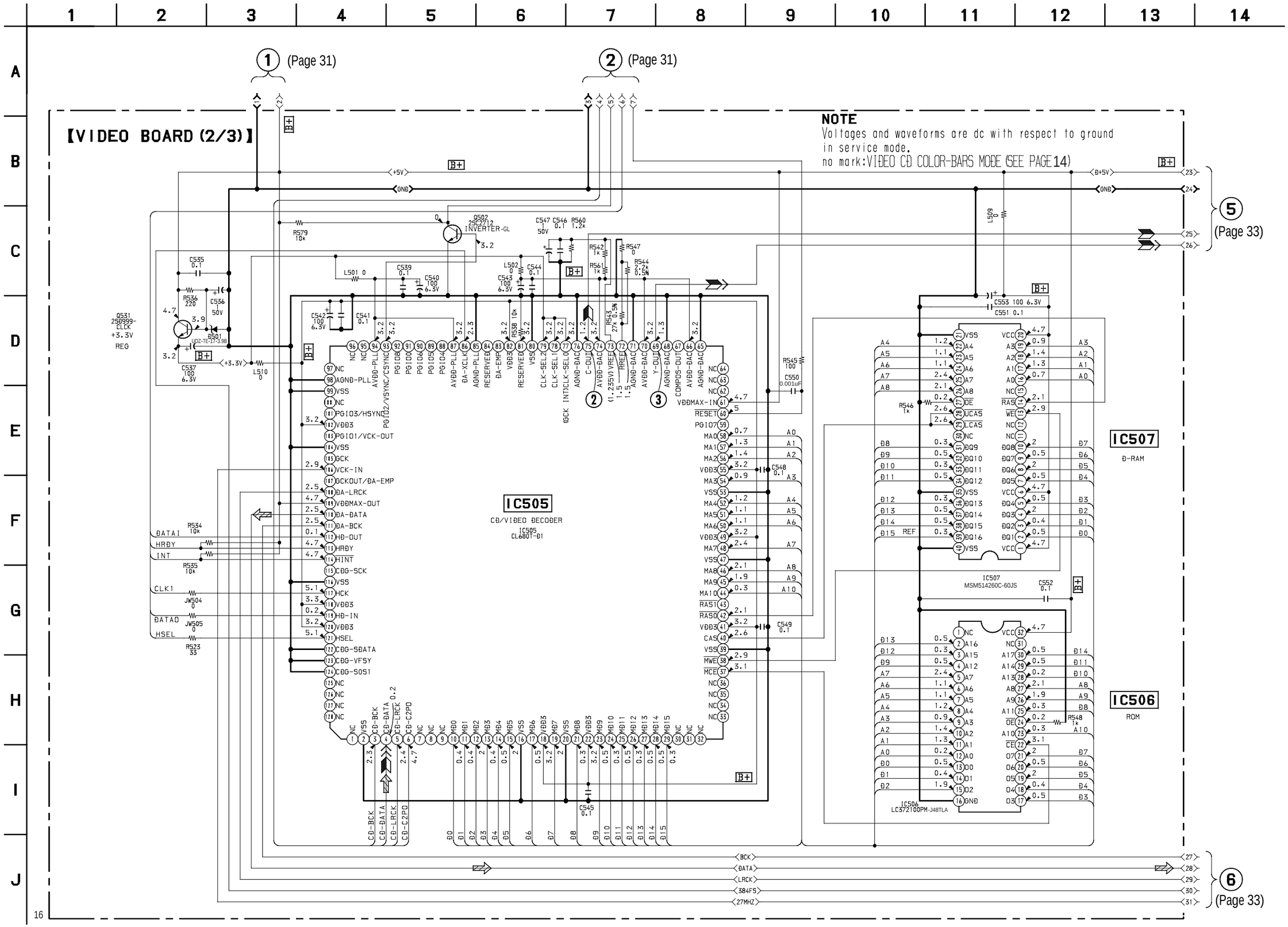
Ref. No.	Location
IC501	C-2
IC502	B-1
IC506	C-3
Q302	E-3
Q303	D-1
Q453	E-2
Q454	E-2
Q531	D-1

6-6. SCHEMATIC DIAGRAM VIDEO (1/3) SECTION

• Refer to page 63 for IC Pin Functions. • Refer to page 27 for Waveforms.

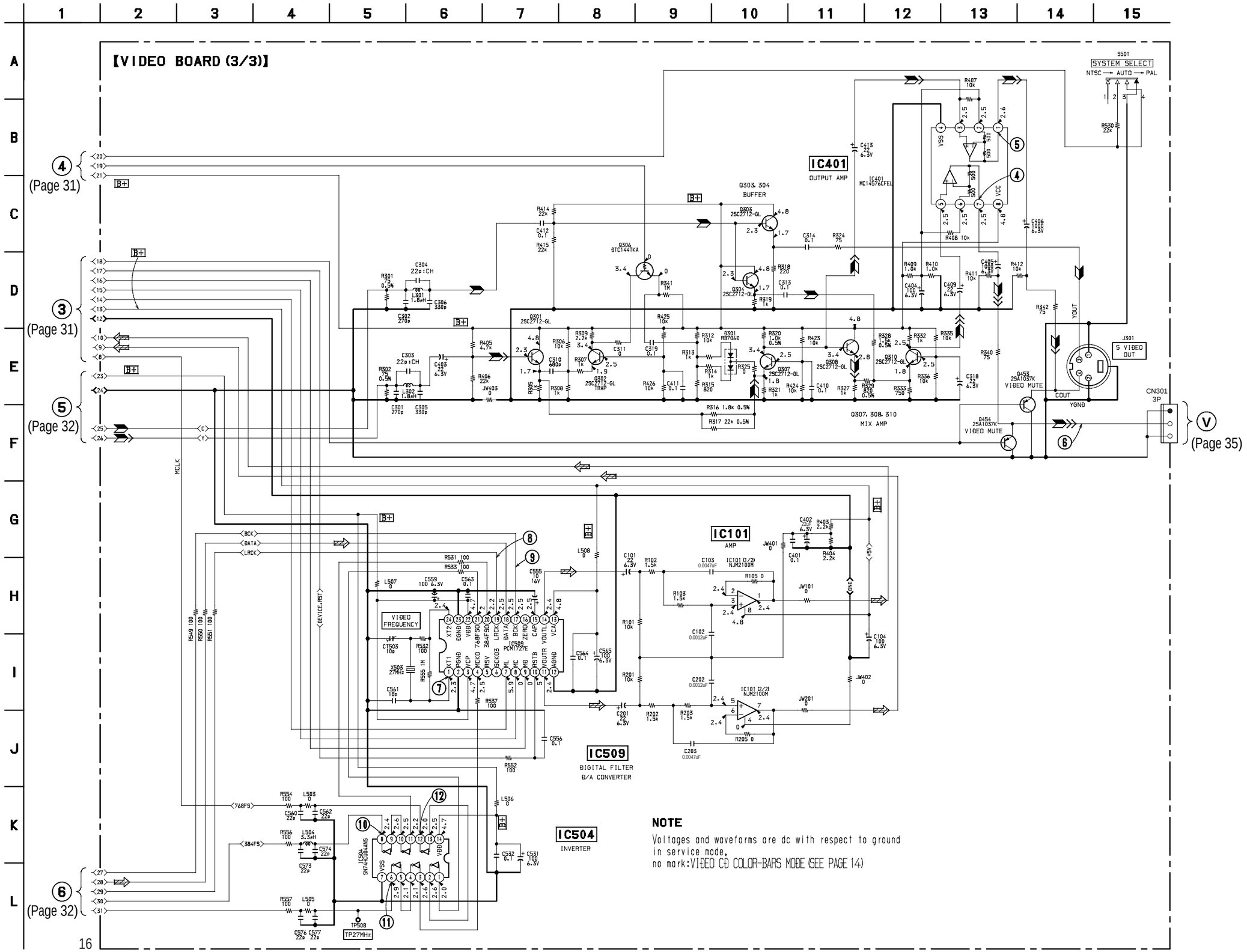


6-7. SCHEMATIC DIAGRAM VIDEO (2/3) SECTION • Refer to page 65 for IC Pin Functions. • Refer to page 27 for Waveforms. • Refer to page 30 for Printed Wiring Board.



6-8. SCHEMATIC DIAGRAM VIDEO (3/3) SECTION

• Refer to page 60 for IC Block Diagrams. • Refer to page 27 for Waveforms. • Refer to page 30 for Printed Wiring Board.

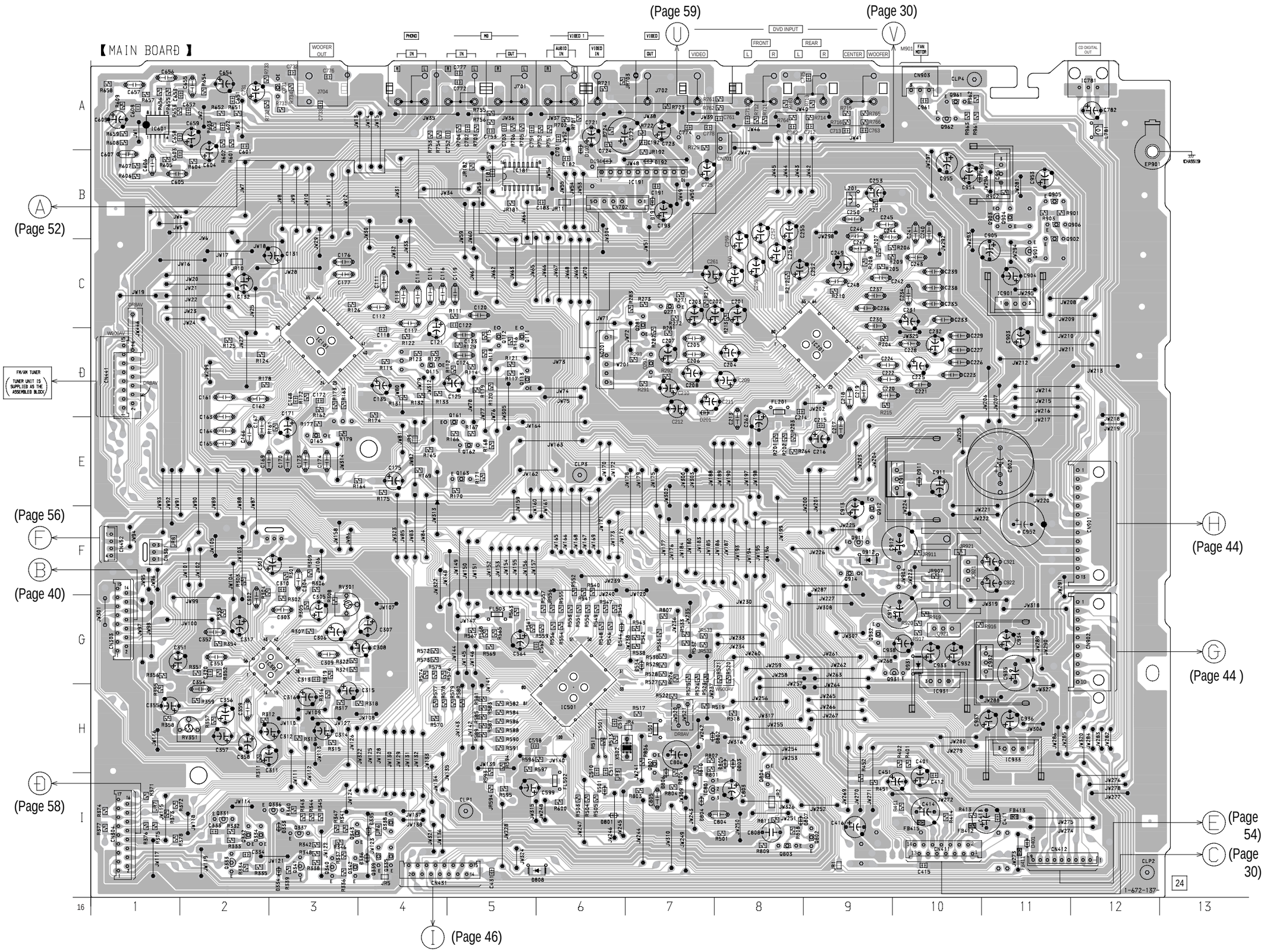


- **Semiconductor Location**

Ref. No.	Location
D333	I-3
D334	I-3
D335	I-4
D336	I-4
D501	I-6
D534	G-7
D544	G-7
D802	H-8
D803	H-8
D804	H-7
D805	H-8
D806	H-7
D807	I-9
D808	I-6
D911	E-10
D912	F-9
D913	F-10
D931	G-10
D951	B-11
IC101	D-3
IC201	C-9
IC181	B-5
IC191	B-7
IC301	G-3
IC501	H-6
IC601	A-1
IC901	C-11
IC931	G-10
IC932	G-11
IC933	H-11
IC951	B-11
IC801	I-8
IC911	E-10
Q111	D-5
Q112	D-5
Q113	D-5
Q115	D-4
Q161	E-5
Q162	E-5
Q163	E-5
Q165	E-3
Q271	C-7
Q281	C-7
Q331	I-2
Q332	I-2
Q333	I-2
Q334	I-2
Q335	I-4
Q336	I-3
Q337	I-3
Q338	I-4
Q339	I-4
Q340	I-3
Q341	I-3
Q342	I-3
Q343	I-3
Q801	H-7
Q802	I-9
Q803	I-8
Q804	I-8
Q901	C-11
Q902	B-11
Q903	B-11
Q904	B-11
Q905	B-11
Q906	B-11
Q911	F-9
Q912	F-9
Q913	F-9
Q914	F-9
Q931	G-10
Q932	G-9
Q961	A-10
Q962	A-10

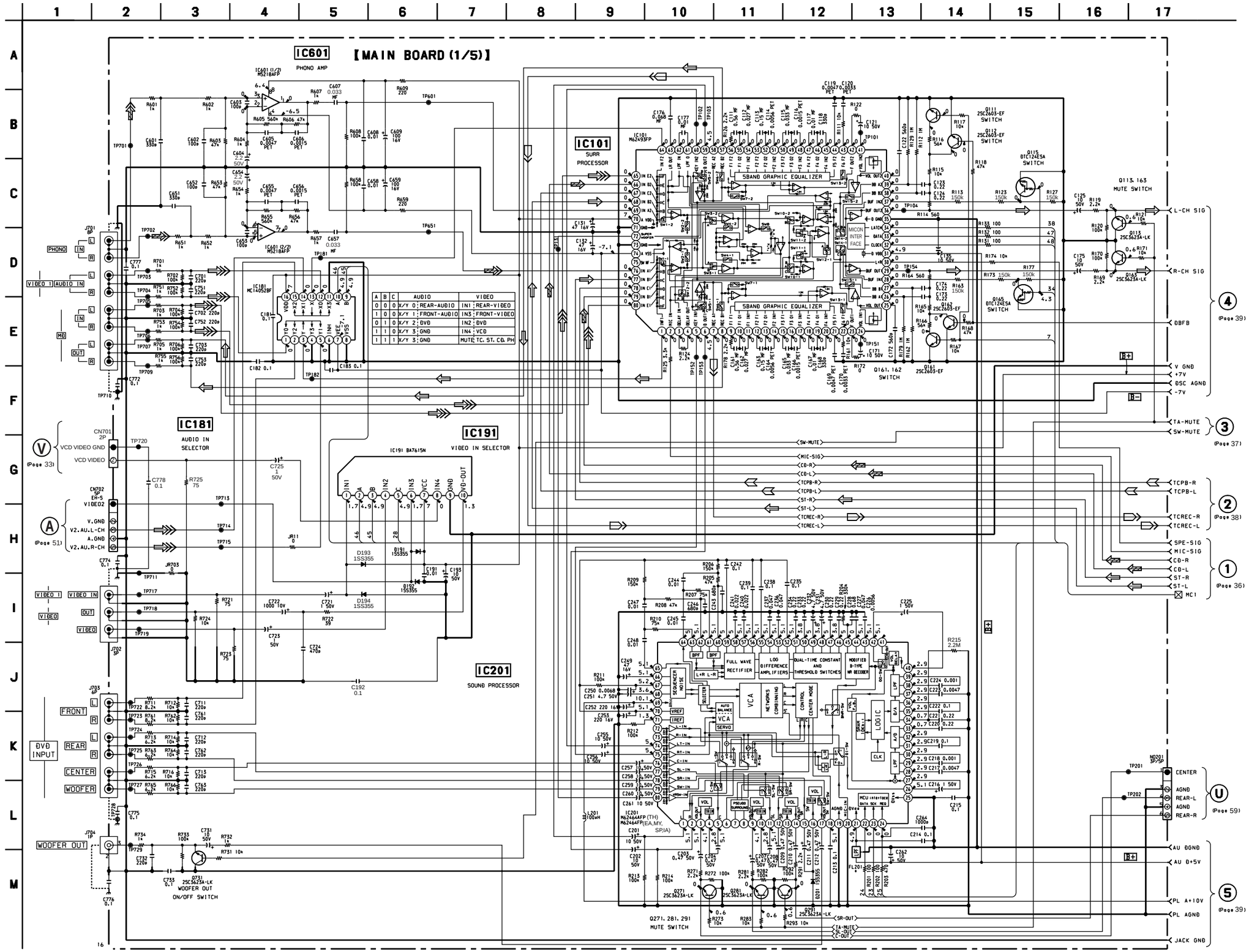
6-9. PRINTED WIRING BOARD MAIN SECTION

• Refer to page 19 for Circuit Boards Location.



6-10. SCHEMATIC DIAGRAM MAIN (1/5) SECTION

• Refer to page 60 for IC Block Diagrams.



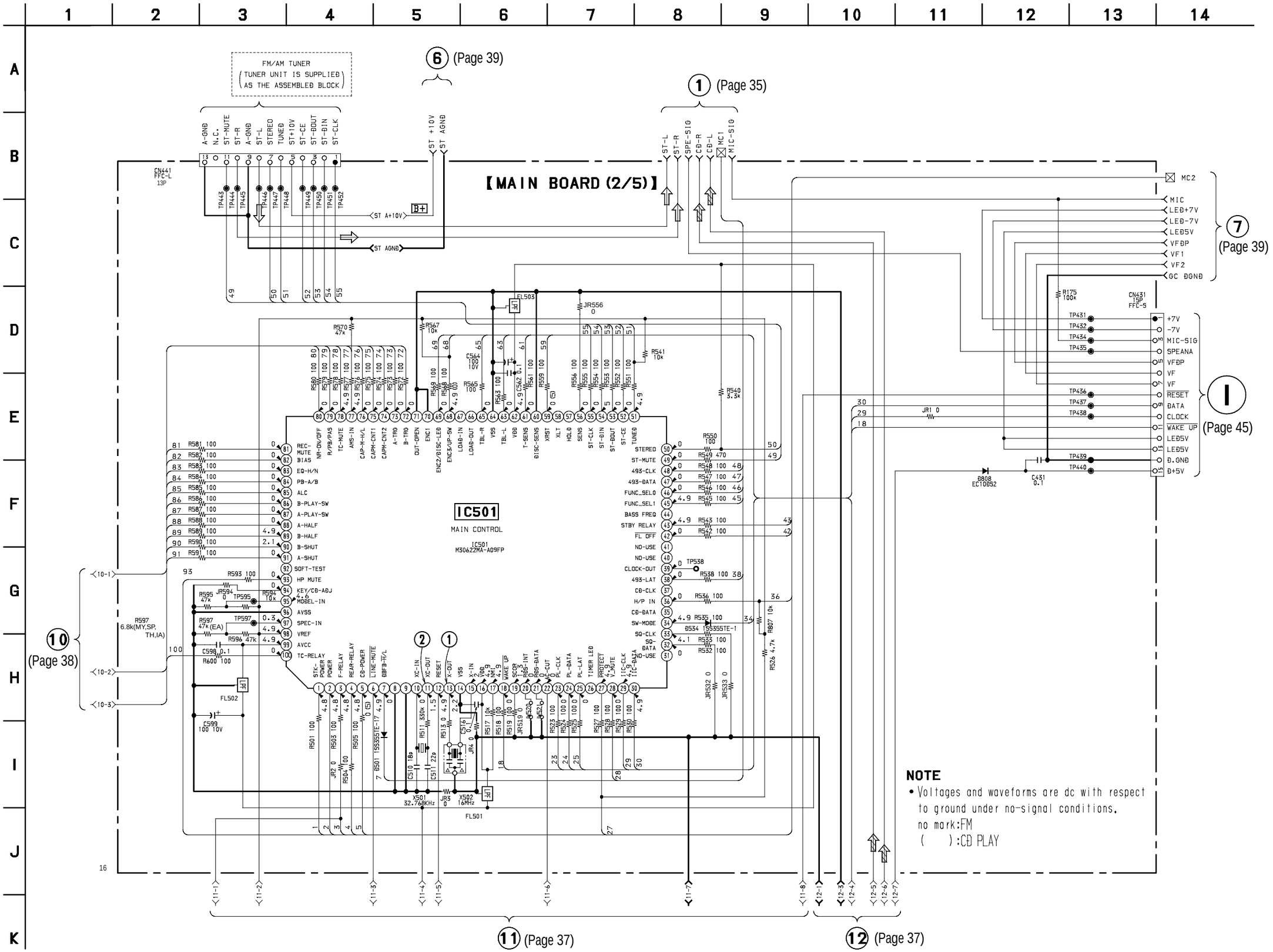
A	B	C	AUDIO	VIDEO
0	0	0	X/Y 0 : REAR-AUDIO	IN1 : REAR-VIDEO
1	0	0	X/Y 1 : FRONT-AUDIO	IN3 : FRONT-VIDEO
0	1	0	X/Y 2 : DVD	IN2 : DVD
1	1	0	X/Y 3 : GND	IN4 : VCD
1	1	1	X/Y 3 : GND	MUTE TC. ST. CD. PH

NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

6-11. SCHEMATIC DIAGRAM MAIN (2/5) SECTION

• Refer to page 27 for Waveforms. • Refer to page 34 for Printed Wiring Board. • Refer to page 61 for IC Pin Functions.



6-12. SCHEMATIC DIAGRAM MAIN (3/5) SECTION

• Refer to page 34 for Printed Wiring Board.

【MAIN BOARD (3/5)】

IC781
IC781 TOTX178
OPTICAL TRANSMITTING
CD DIGITAL OUT

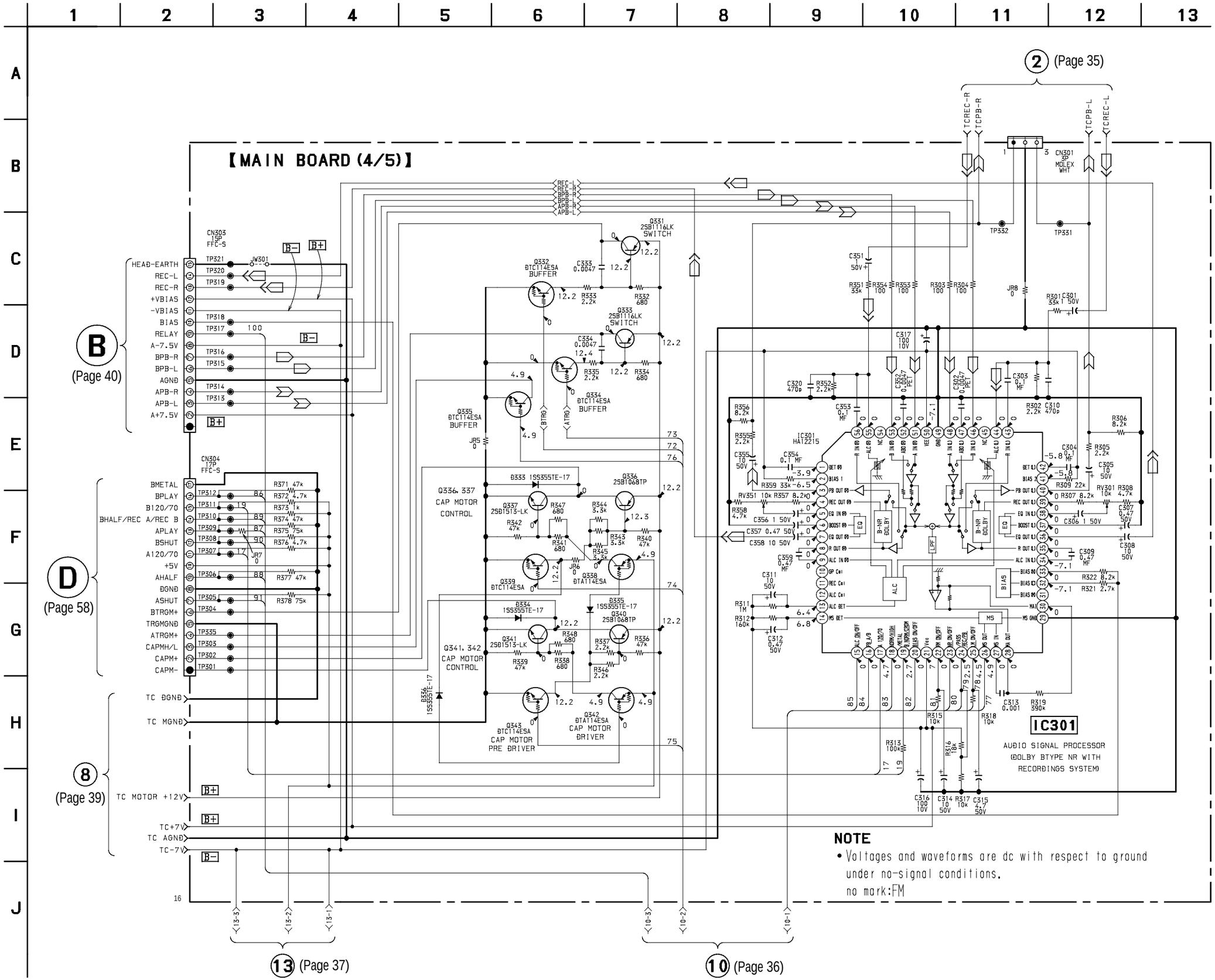
IC801
SYSTEM RESET

NOTE
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

11 (Page 36)
12 (Page 36)
13 (Page 38)
3 (Page 35)
C (Page 31)
E (Page 53)
9 (Page 39)

6-13. SCHEMATIC DIAGRAM MAIN (4/5) SECTION

• Refer to page 34 for Printed Wiring Board.

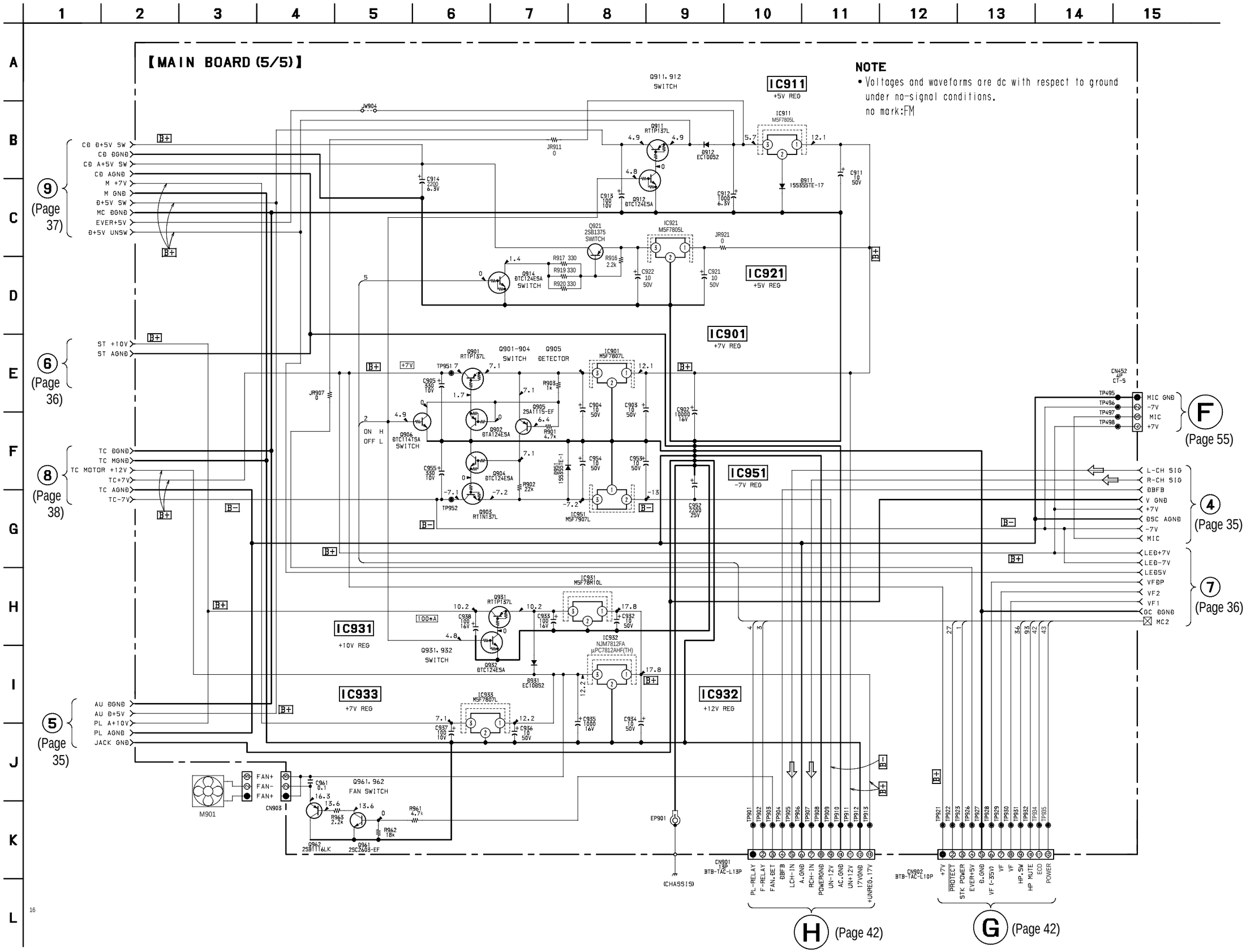


NOTE

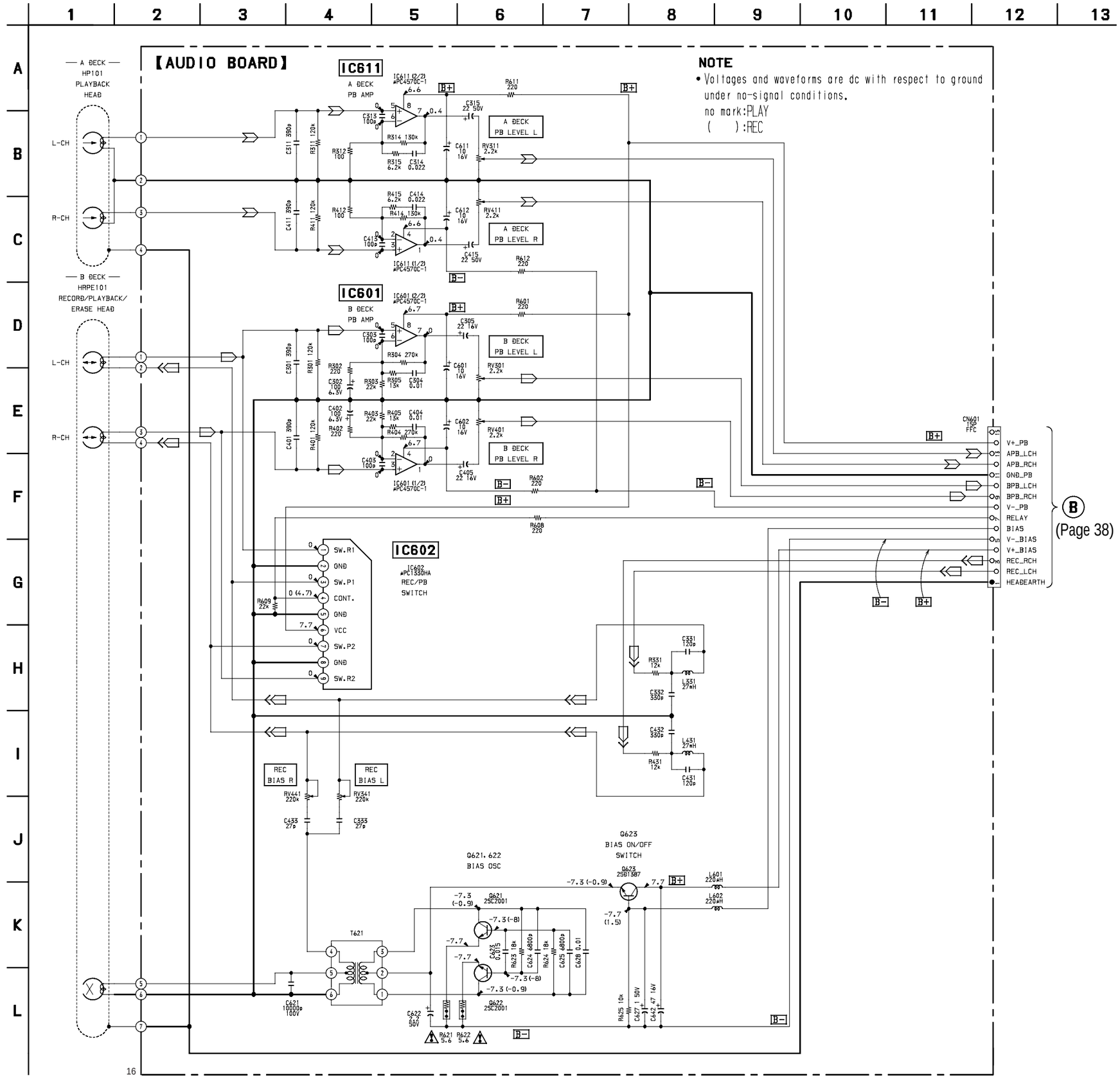
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

6-14. SCHEMATIC DIAGRAM MAIN (5/5) SECTION

• Refer to page 34 for Printed Wiring Board.

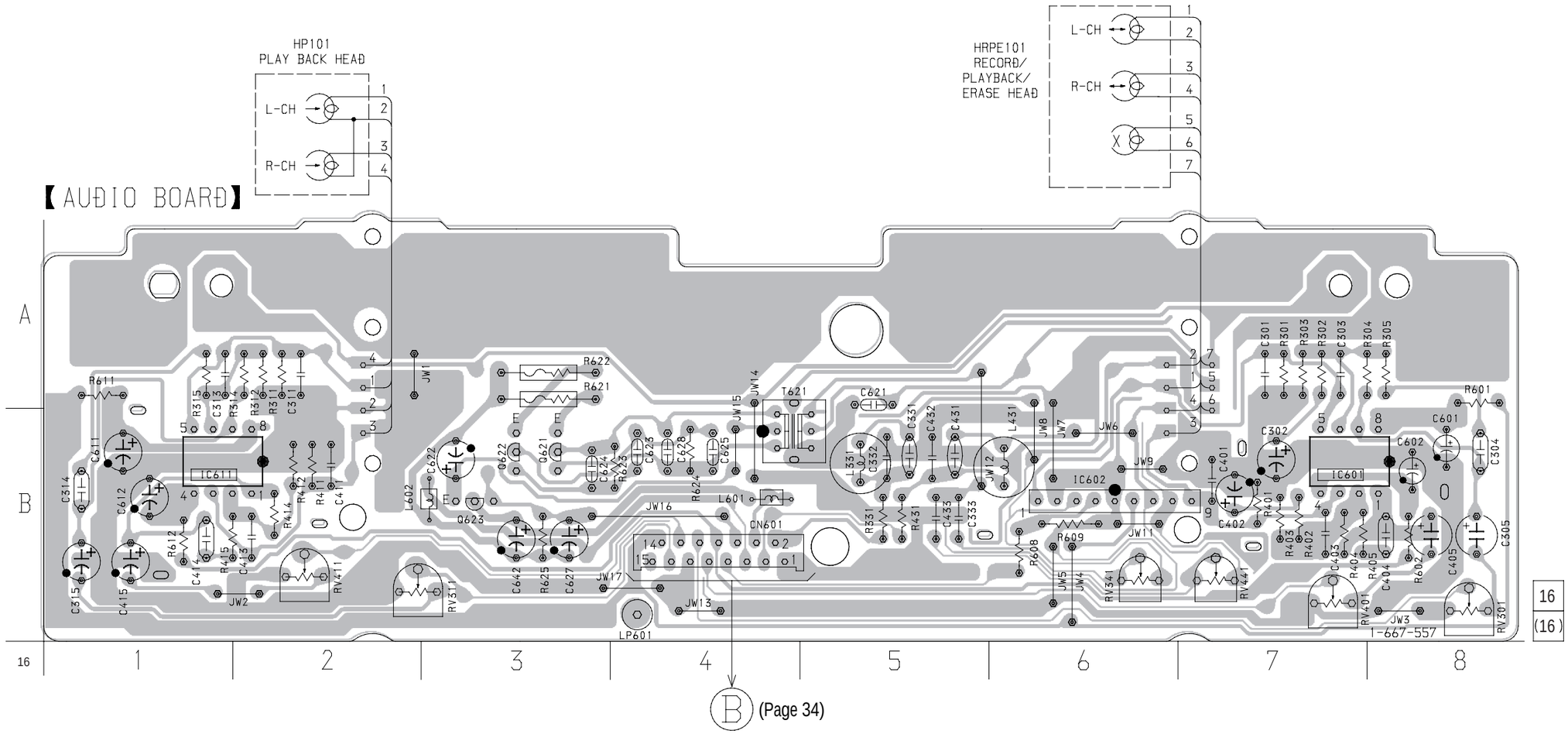


6-15. SCHEMATIC DIAGRAM DECK SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

6-16. PRINTED WIRING BOARD DECK SECTION • Refer to page 19 for Circuit Boards Location.



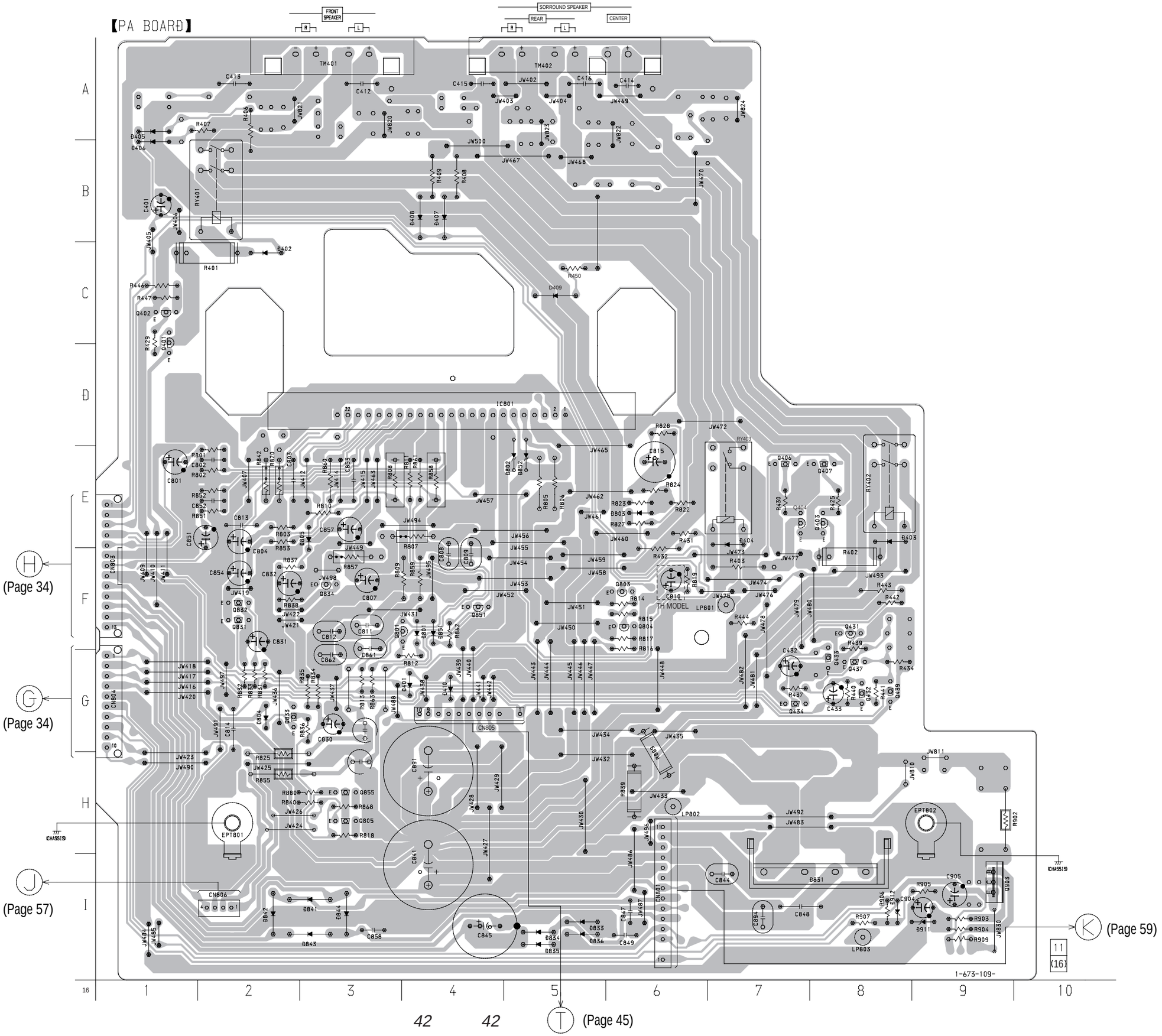
B (Page 34)

6-17. PRINTED WIRING BOARD POWER SECTION

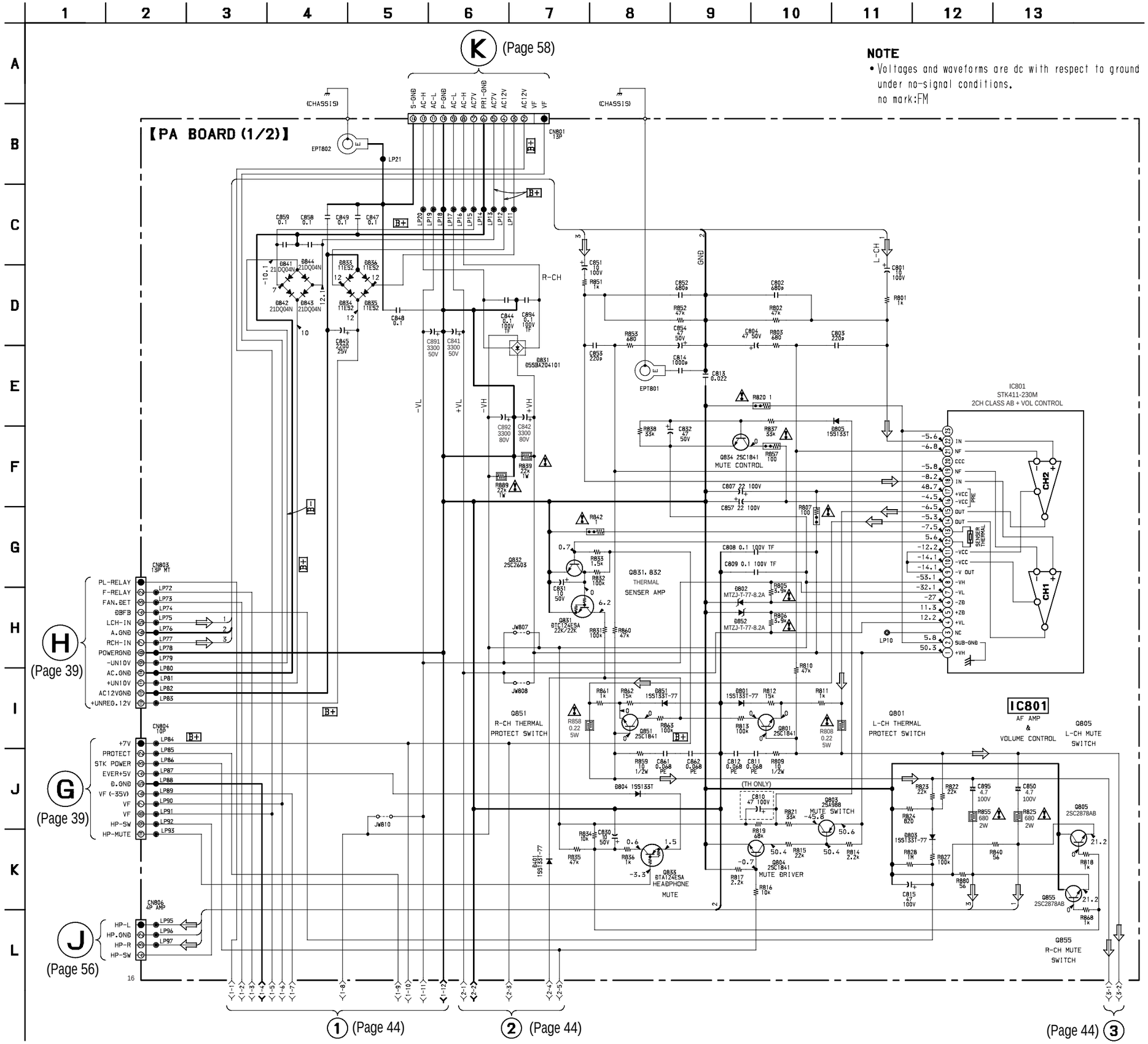
• Refer to page 19 for Circuit Boards Location.

• **Semiconductor Location**

Ref. No.	Location
D401	G-4
D402	C-2
D403	E-8
D405	A-1
D406	B-1
D409	C-5
D410	G-4
D801	F-4
D802	E-5
D803	E-6
D831	I-8
D833	I-5
D834	I-5
D835	I-5
D836	I-5
D841	I-3
D842	I-2
D843	I-3
D844	I-3
D851	F-4
D852	E-5
D911	I-9
D912	I-8
IC801	D-4
Q401	C-1
Q402	C-1
Q403	E-8
Q404	E-7
Q406	E-7
Q407	E-8
Q431	F-8
Q432	G-8
Q433	G-8
Q434	G-7
Q437	G-8
Q439	G-8
Q801	F-4
Q803	F-6
Q804	F-6
Q805	H-3
Q831	F-2
Q832	F-2
Q833	G-2
Q834	F-3
Q851	F-4
Q855	H-3
Q903	I-9



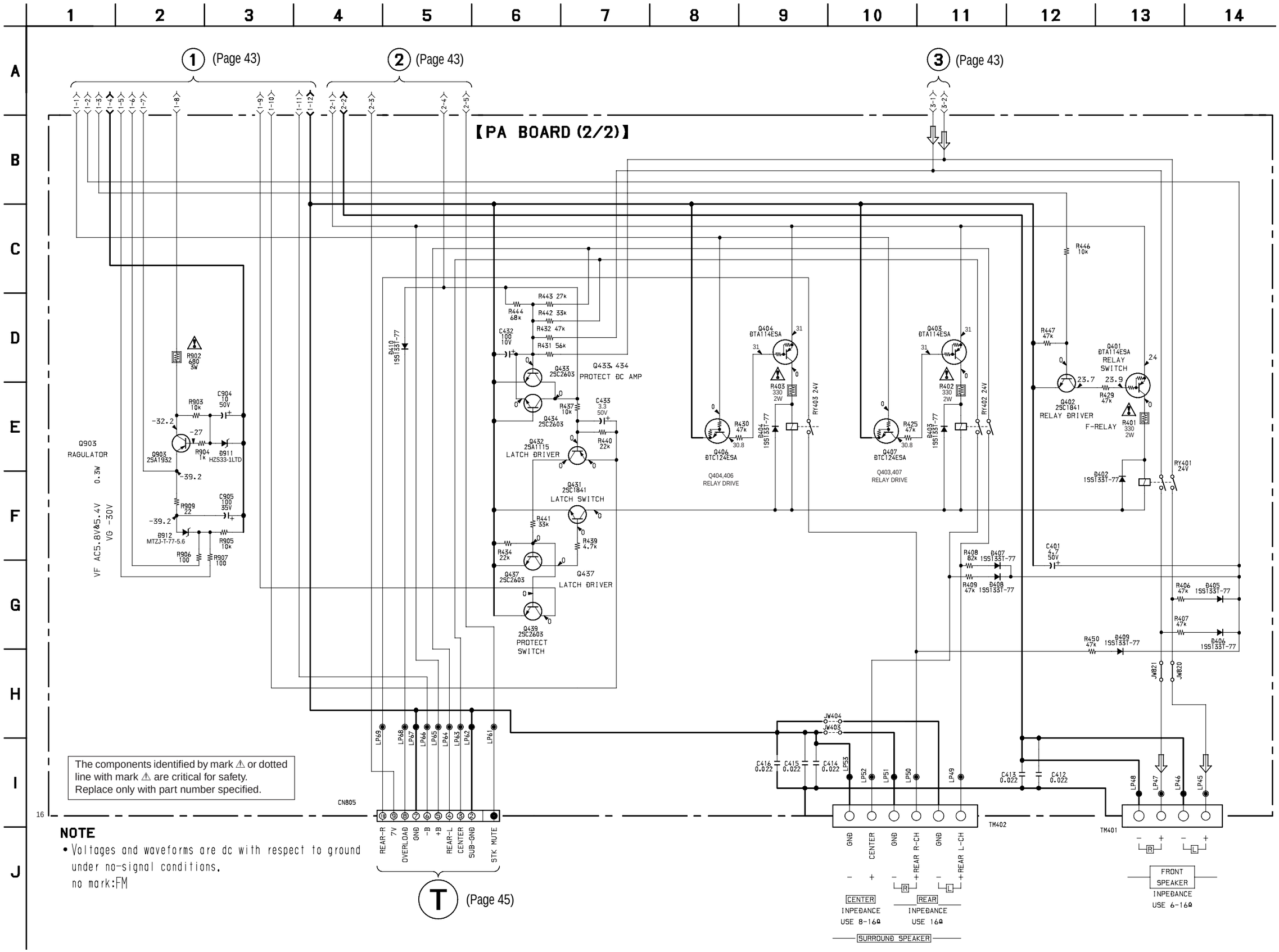
6-18. SCHEMATIC DIAGRAM POWER (1/2) SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

6-19. SCHEMATIC DIAGRAM POWER (2/2) SECTION

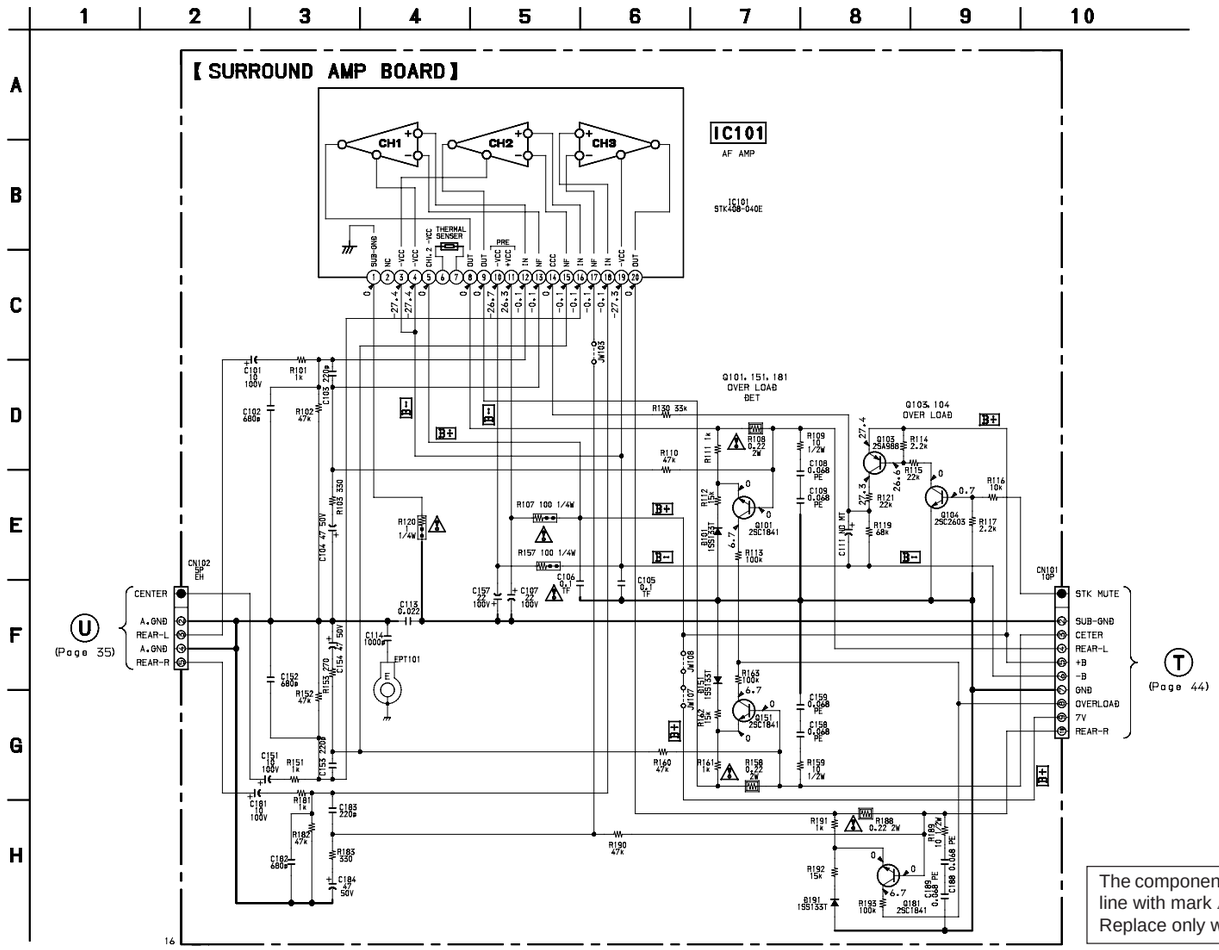
• Refer to page 42 for Printed Wiring Board.



NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

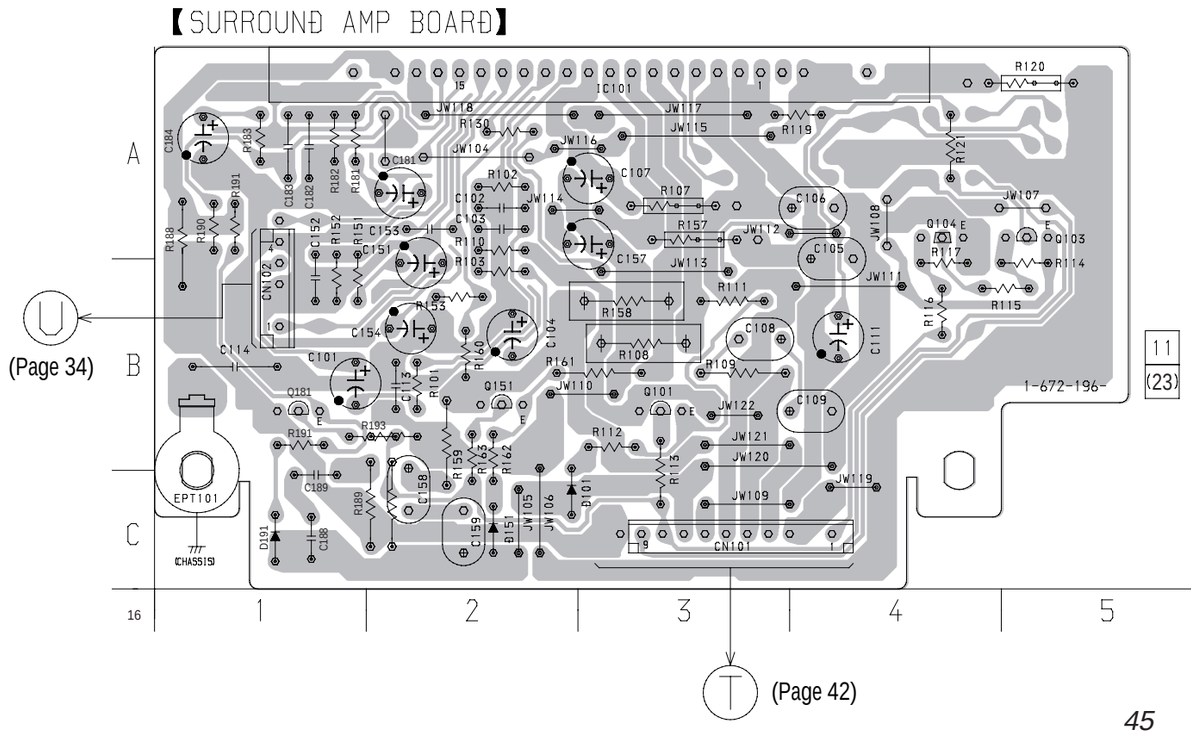
6-20. SCHEMATIC DIAGRAM SURROUND SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

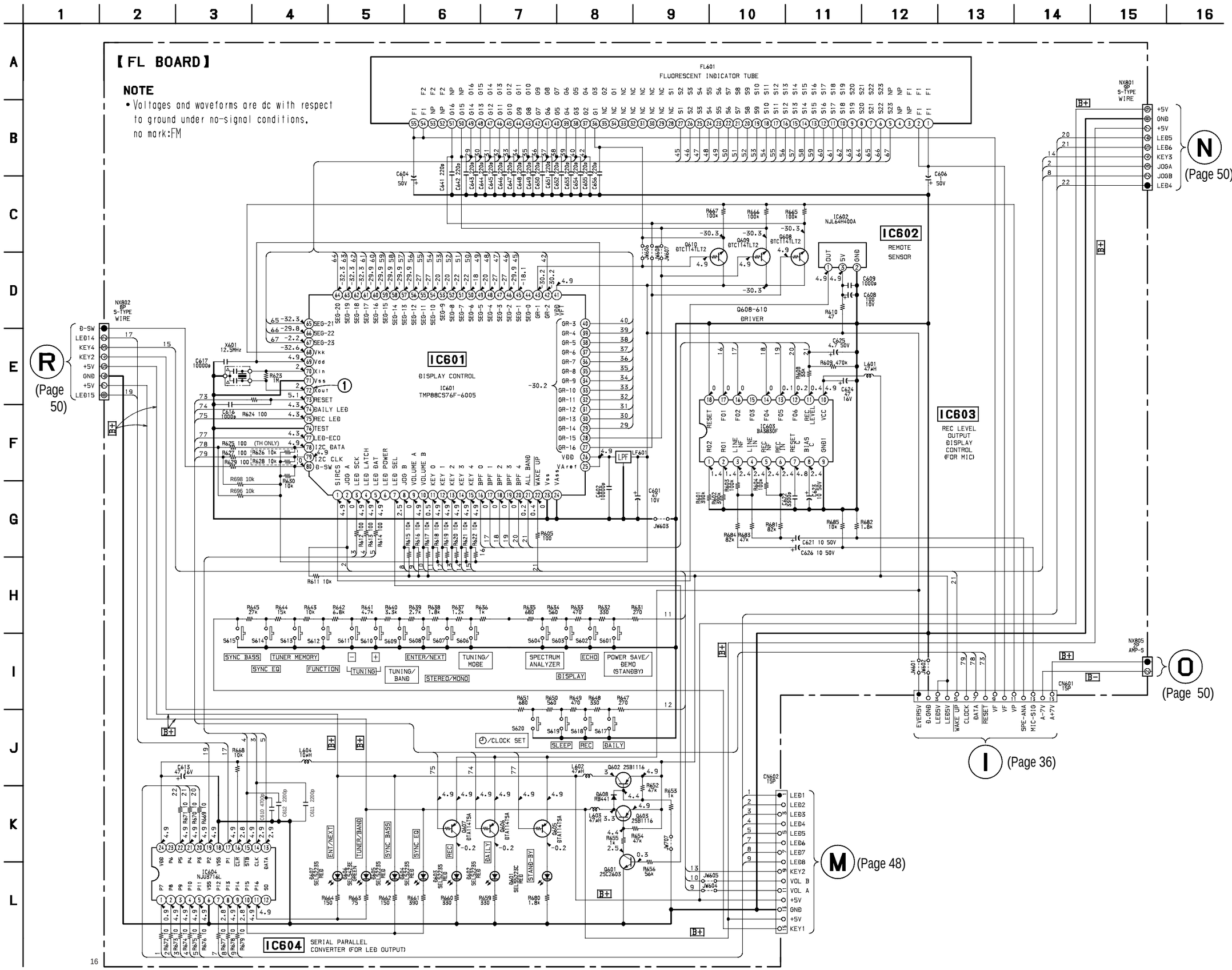
6-21. PRINTED WIRING BOARD SURROUND SECTION

• Refer to page 19 for Circuit Boards Location.



6-22. SCHEMATIC DIAGRAM FL SECTION

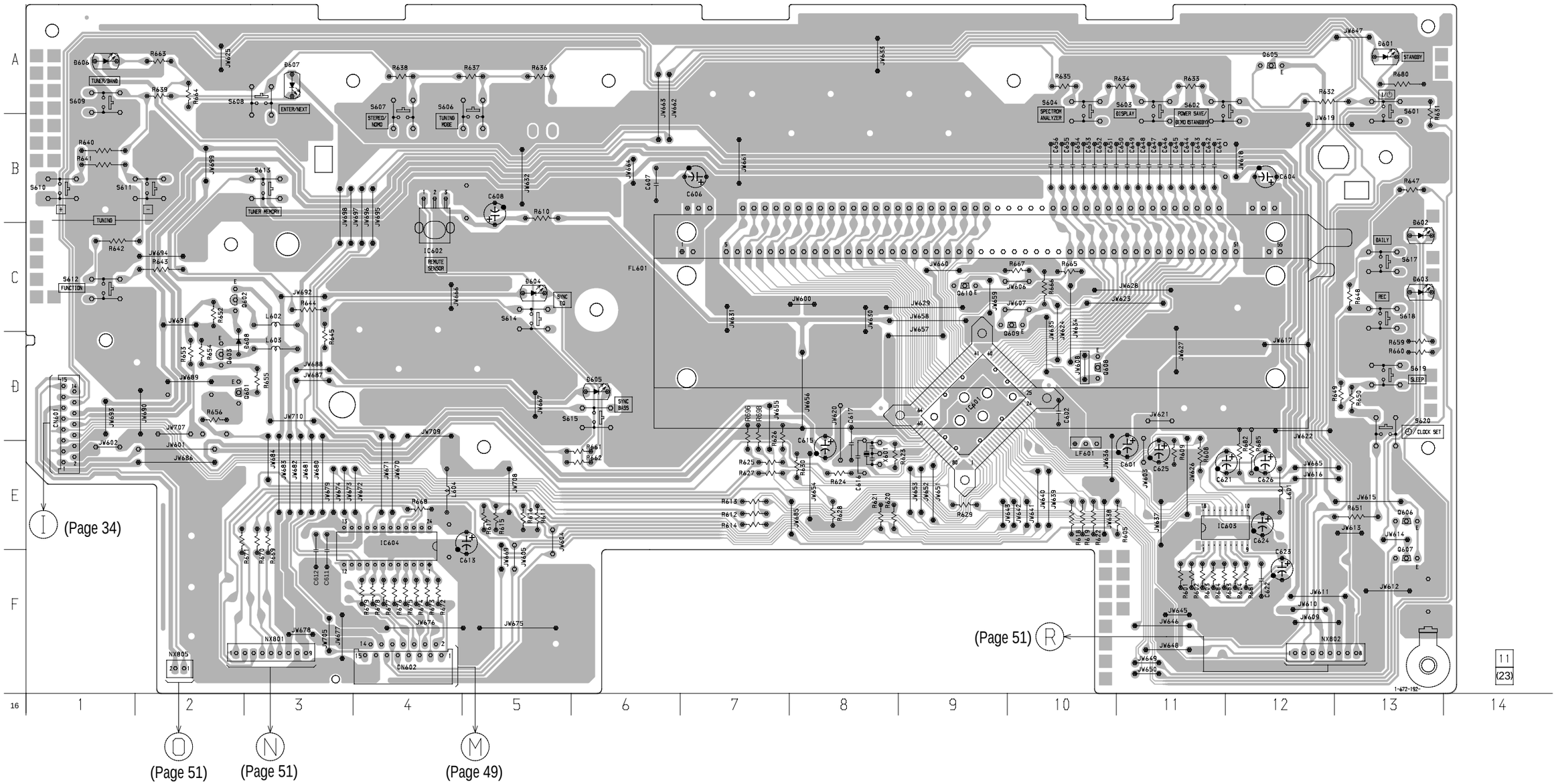
• Refer to page 60 for IC Block Diagrams. • Refer to page 68 for IC Pin Functions.



6-23. PRINTED WIRING BOARD FL SECTION

• Refer to page 19 for Circuit Boards Location.

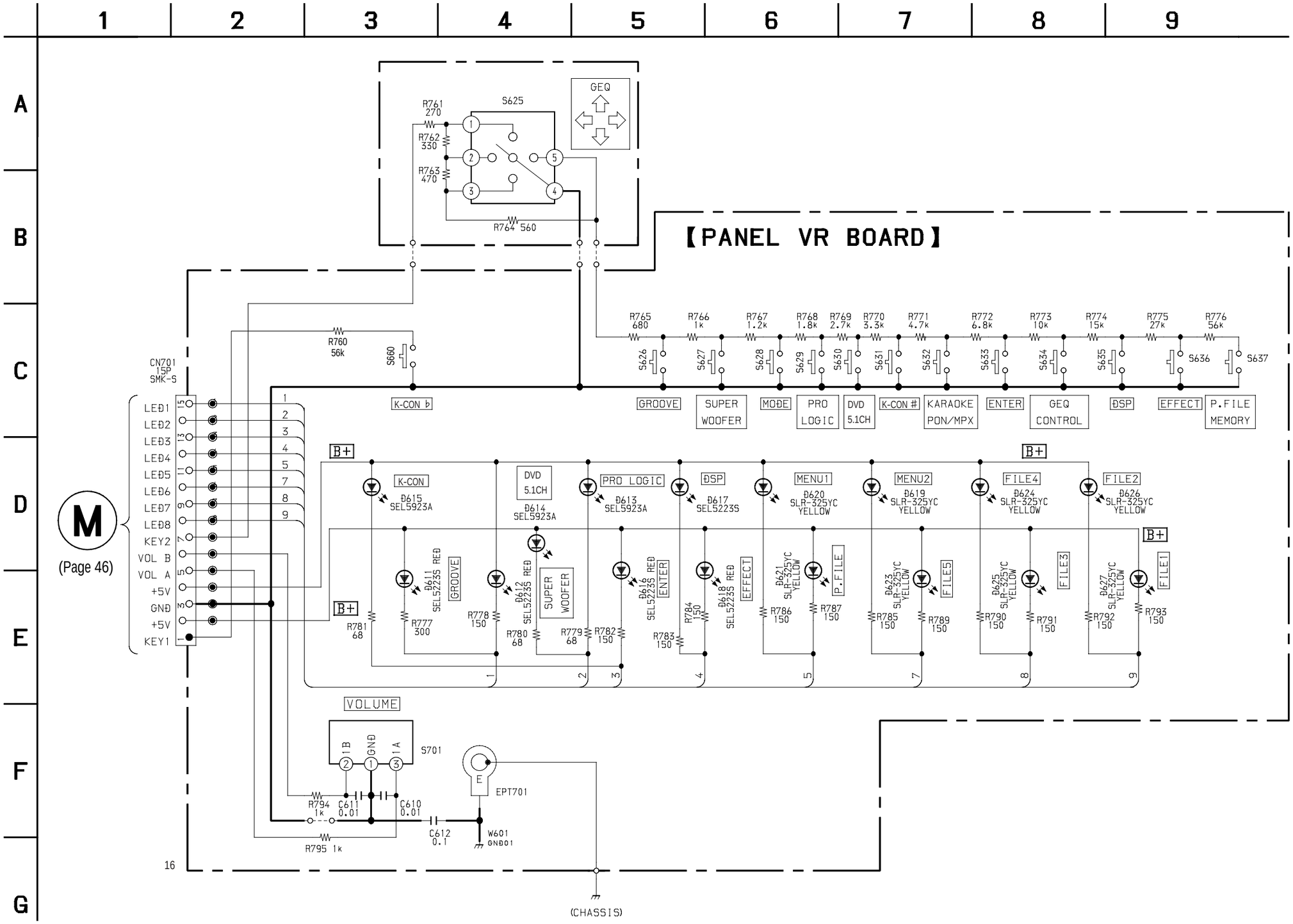
【FL BOARD】



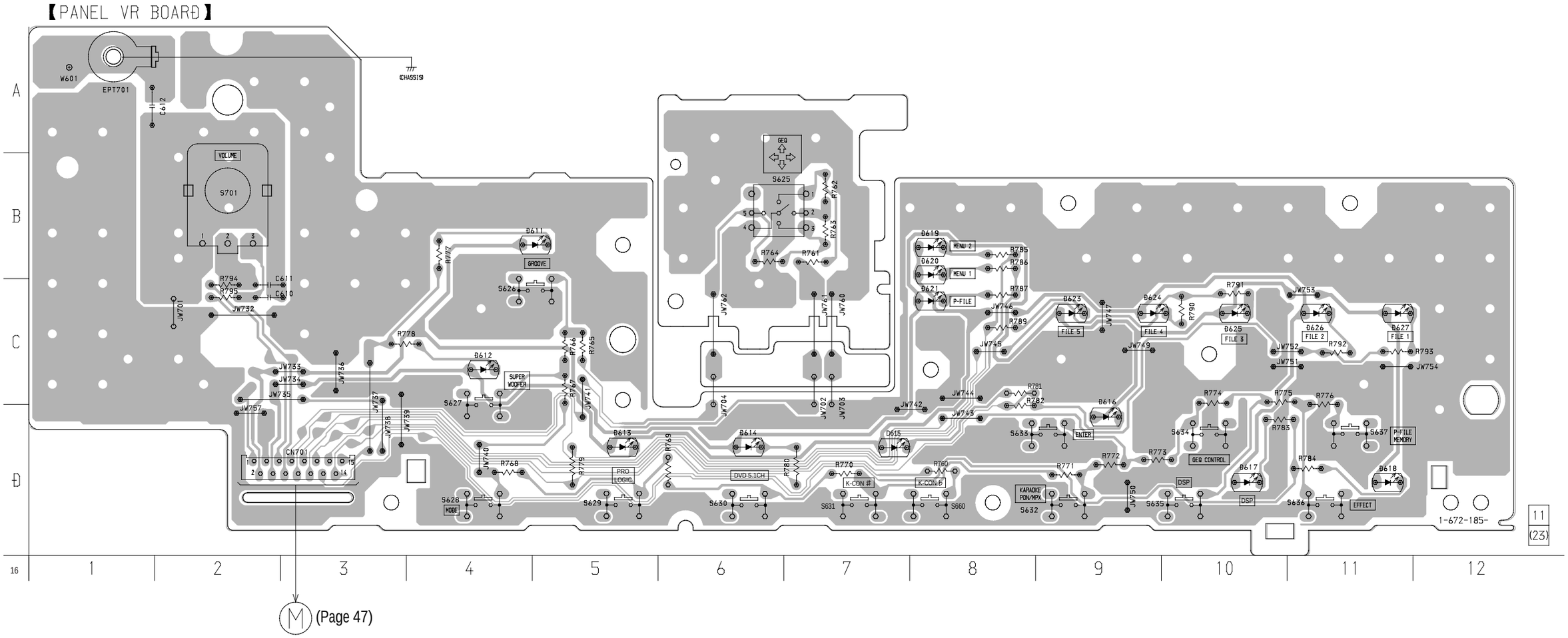
• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D601	A-13	IC604	E-4
D602	C-13		
D603	C-13	Q601	D-2
D604	C-5	Q602	C-2
D605	D-6	Q603	D-2
D606	A-1	Q605	A-12
D607	A-3	Q606	E-13
D608	D-2	Q607	F-13
		Q608	D-10
IC601	D-9	Q609	C-10
IC602	C-4	Q610	C-9
IC603	E-12		

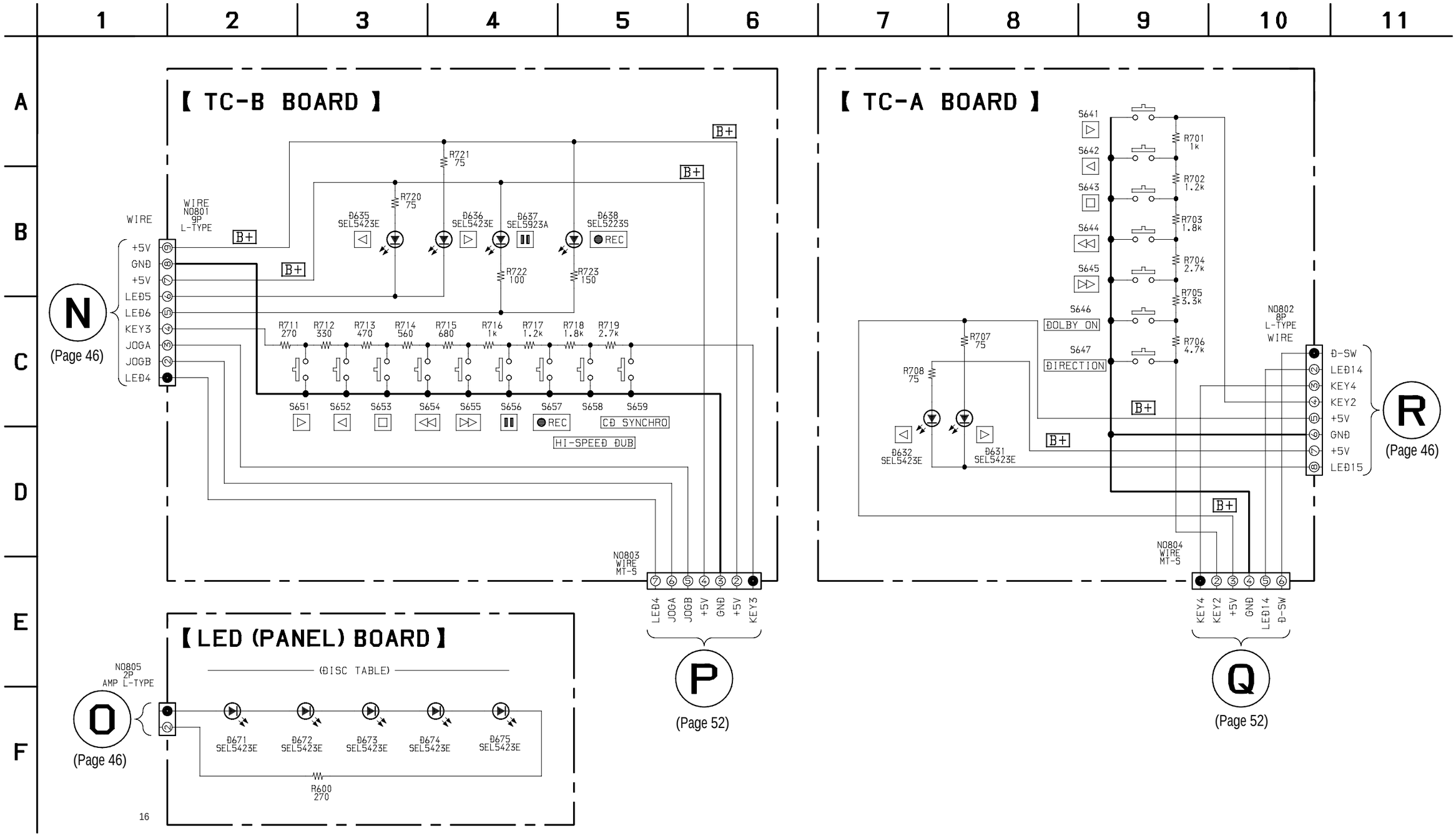
6-24. SCHEMATIC DIAGRAM PANEL VR SECTION



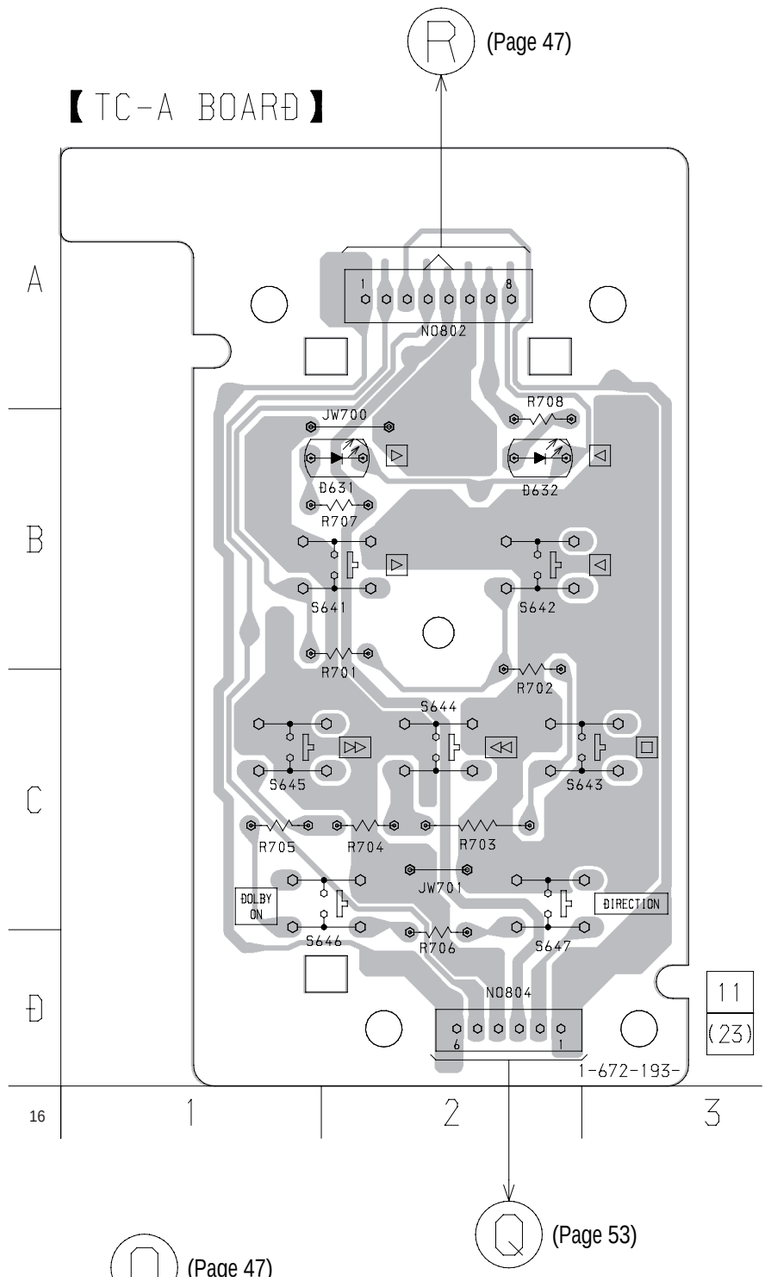
6-25. PRINTED WIRING BOARD PANEL VR SECTION • Refer to page 19 for Circuit Boards Location.

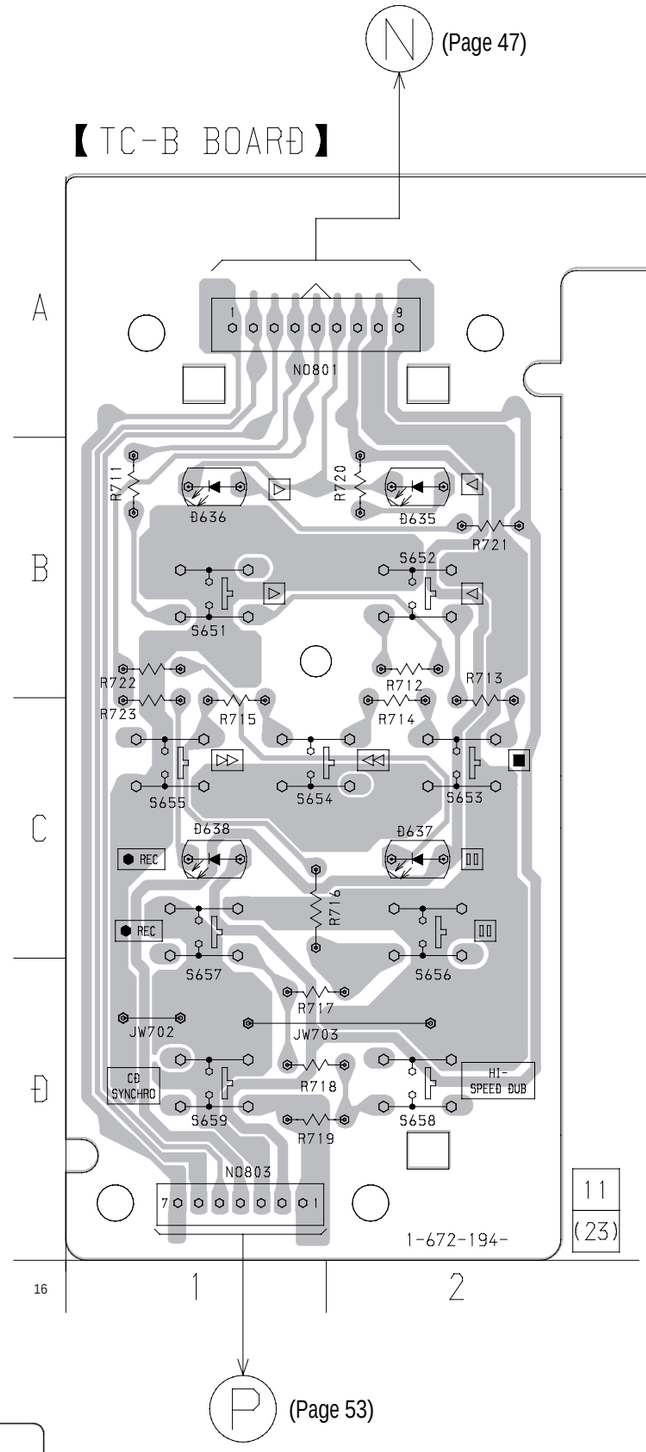


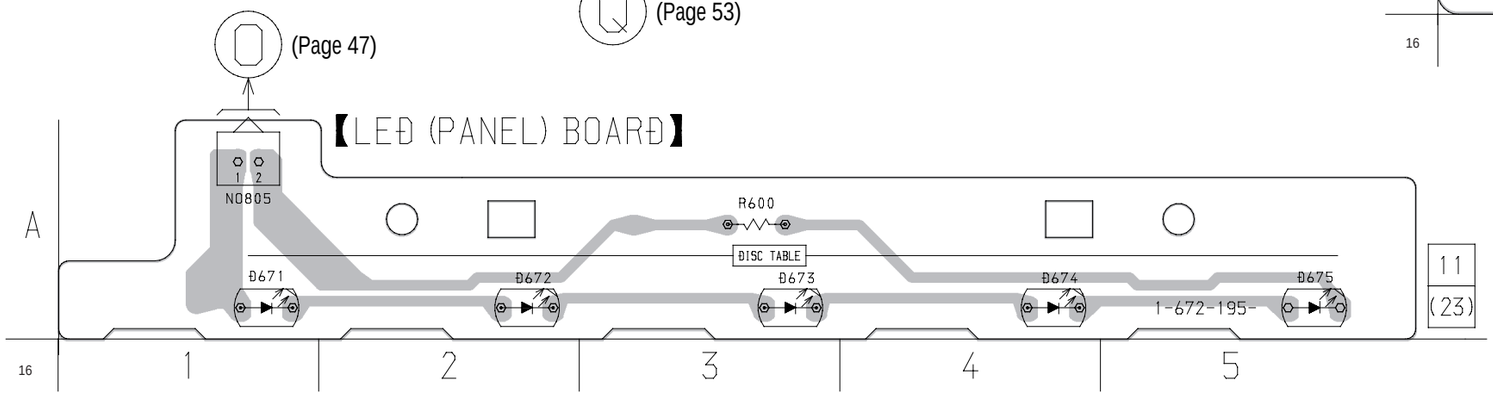
6-26. SCHEMATIC DIAGRAM TC PANEL SECTION



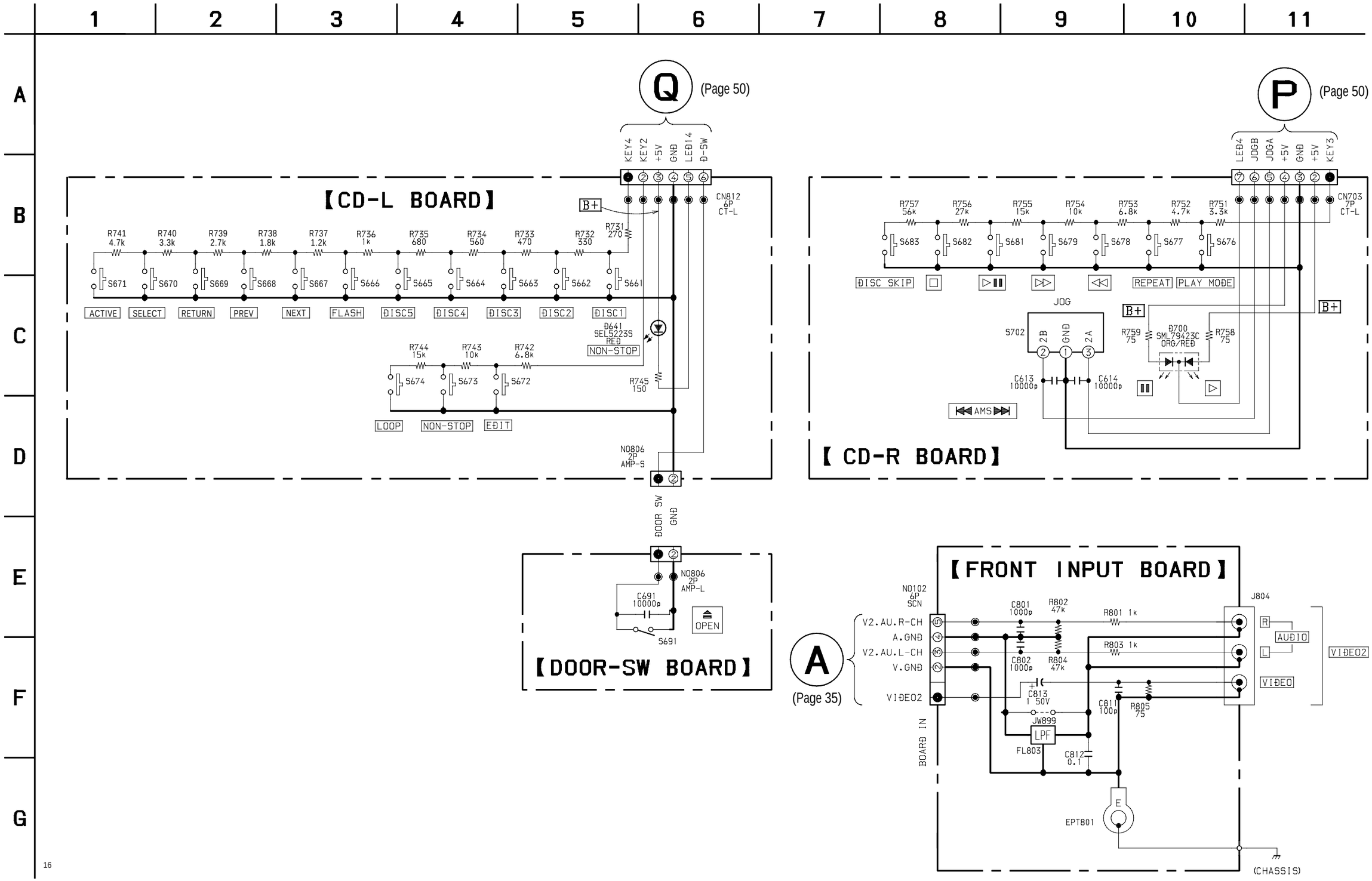
6-27. PRINTED WIRING BOARD TC PANEL SECTION • Refer to page 19 for Circuit Boards Location.







6-28. SCHEMATIC DIAGRAM CD PANEL SECTION



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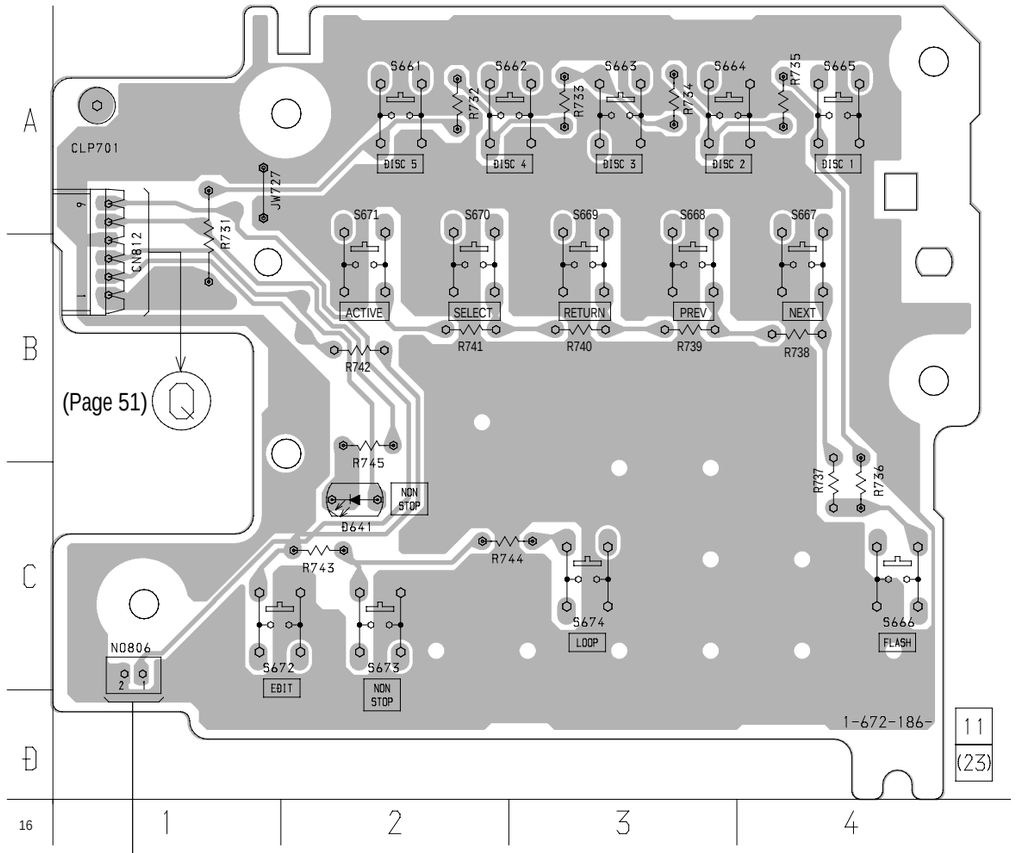
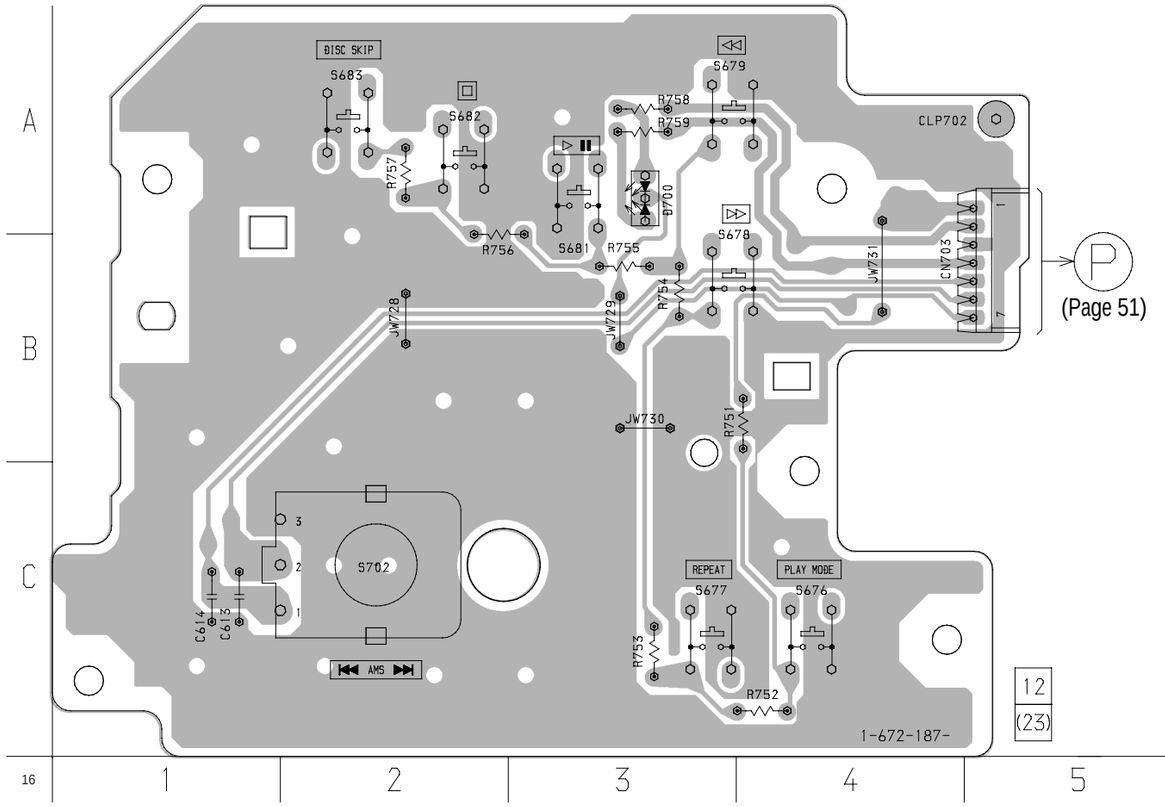
6-29. PRINTED WIRING BOARD CD PANEL SECTION • Refer to page 19 for Circuit Boards Location.

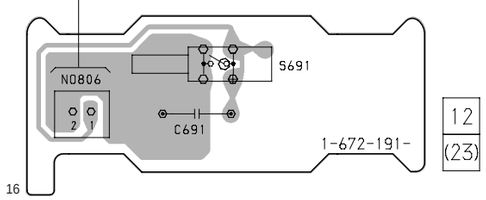
【CD-L BOARD】



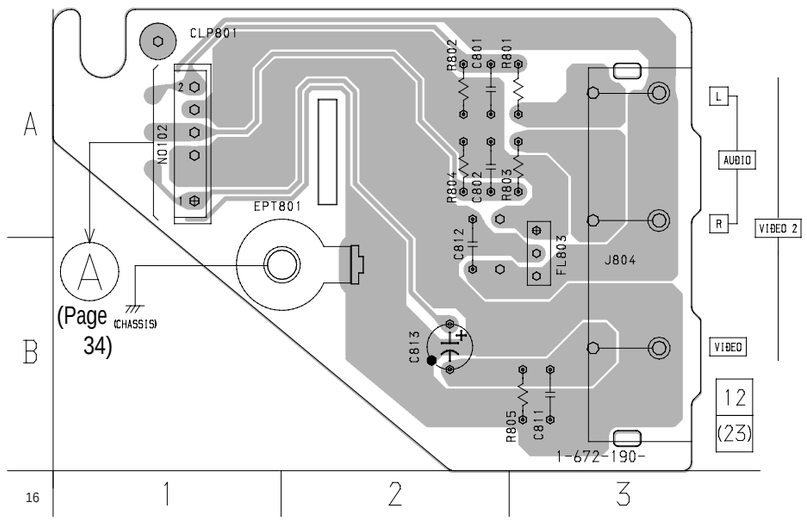
【CD-R BOARD】



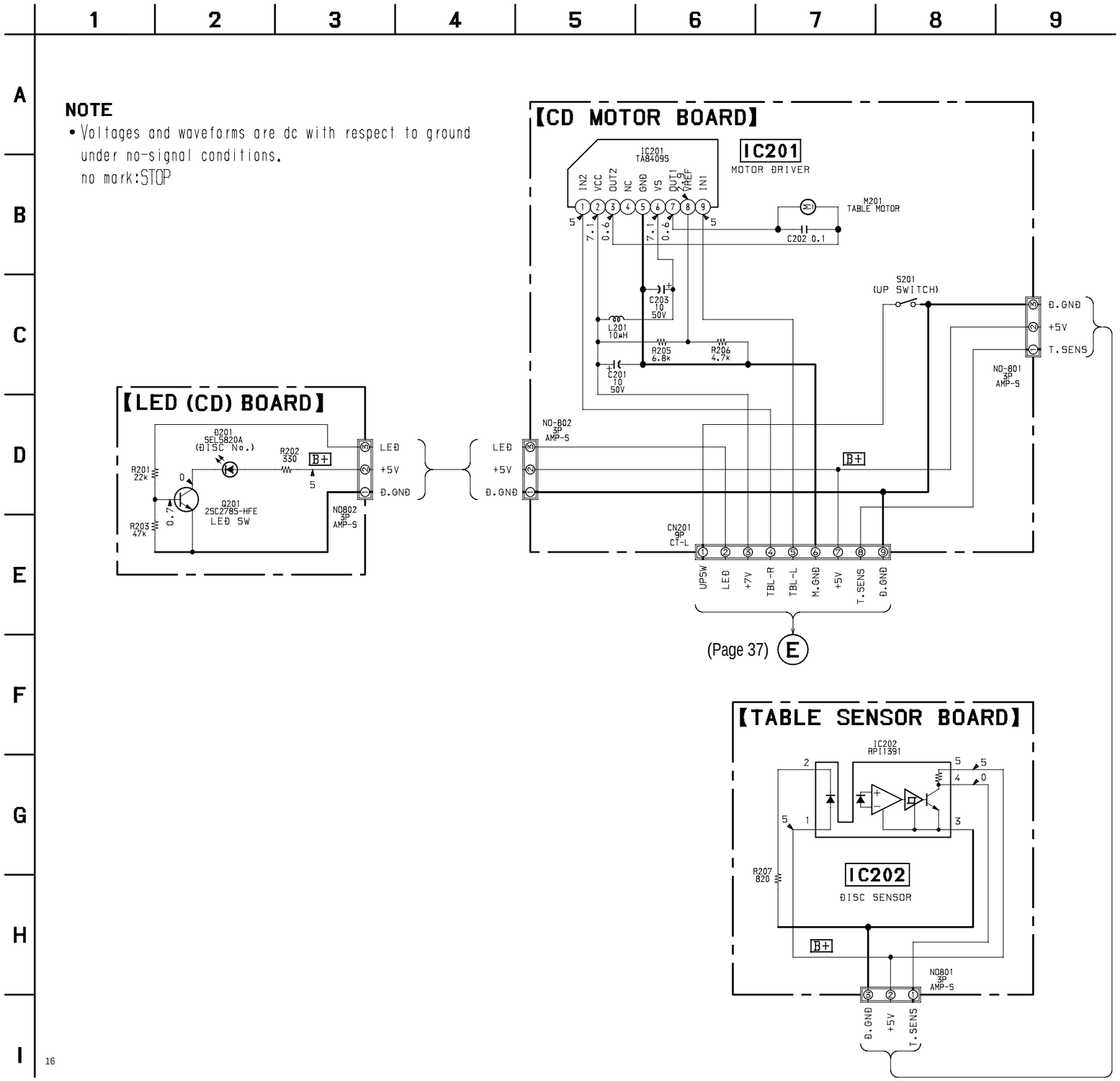
【DOOR-SW BOARD】



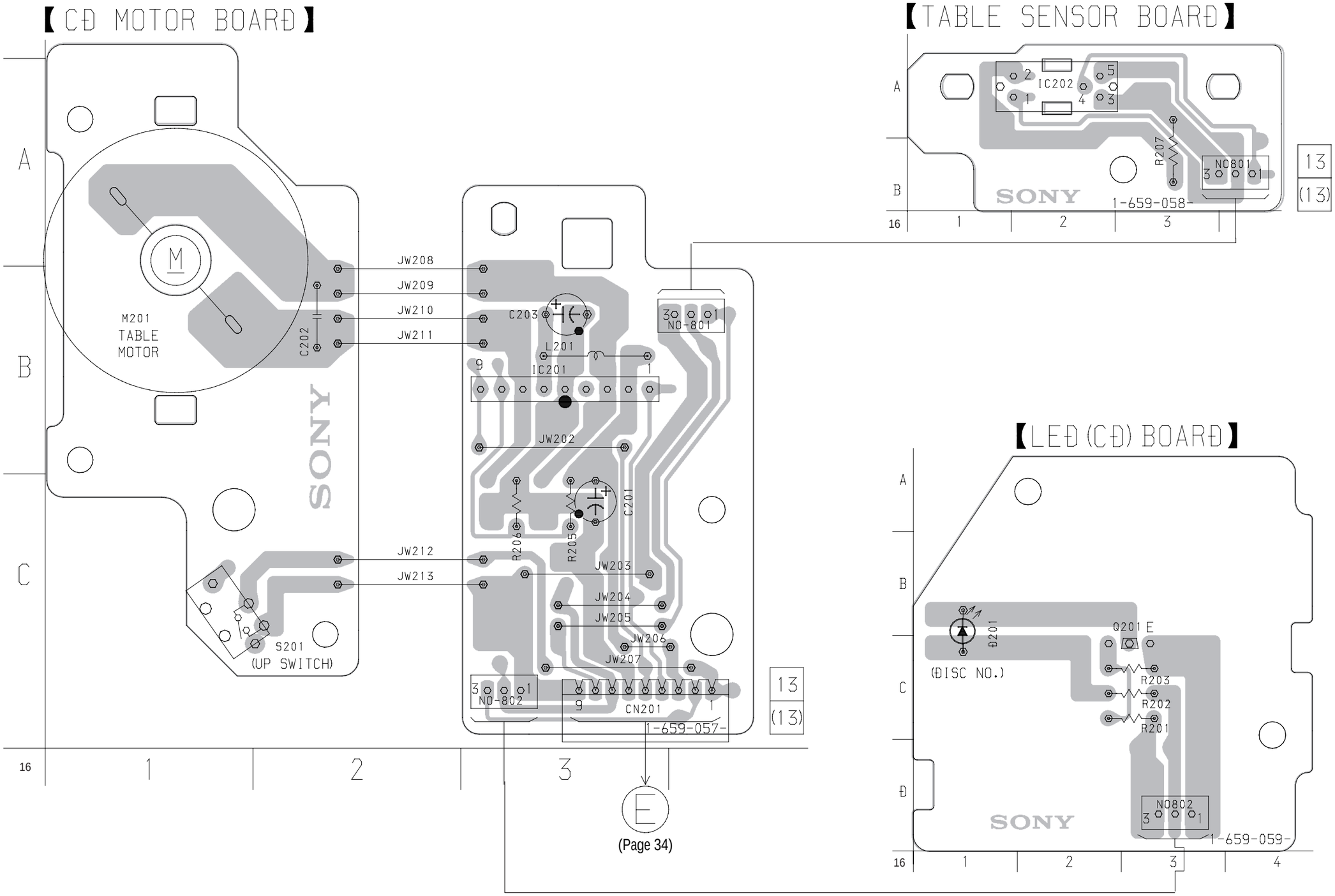
【FRONT INPUT BOARD】



6-30. SCHEMATIC DIAGRAM CD MOTOR SECTION

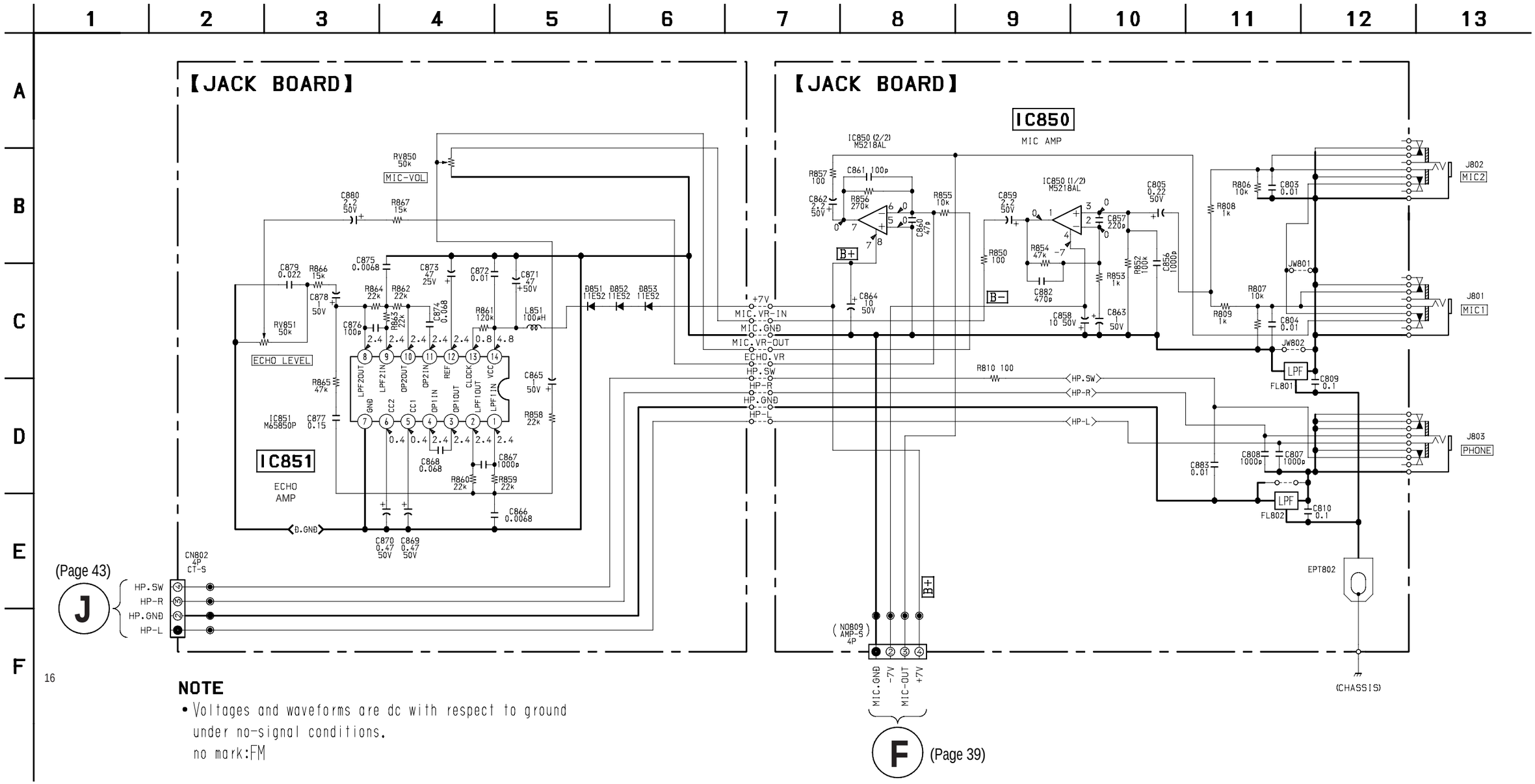


6-31. PRINTED WIRING BOARD CD MOTOR SECTION • Refer to page 19 for Circuit Boards Location.



6-32. SCHEMATIC DIAGRAM JACK SECTION

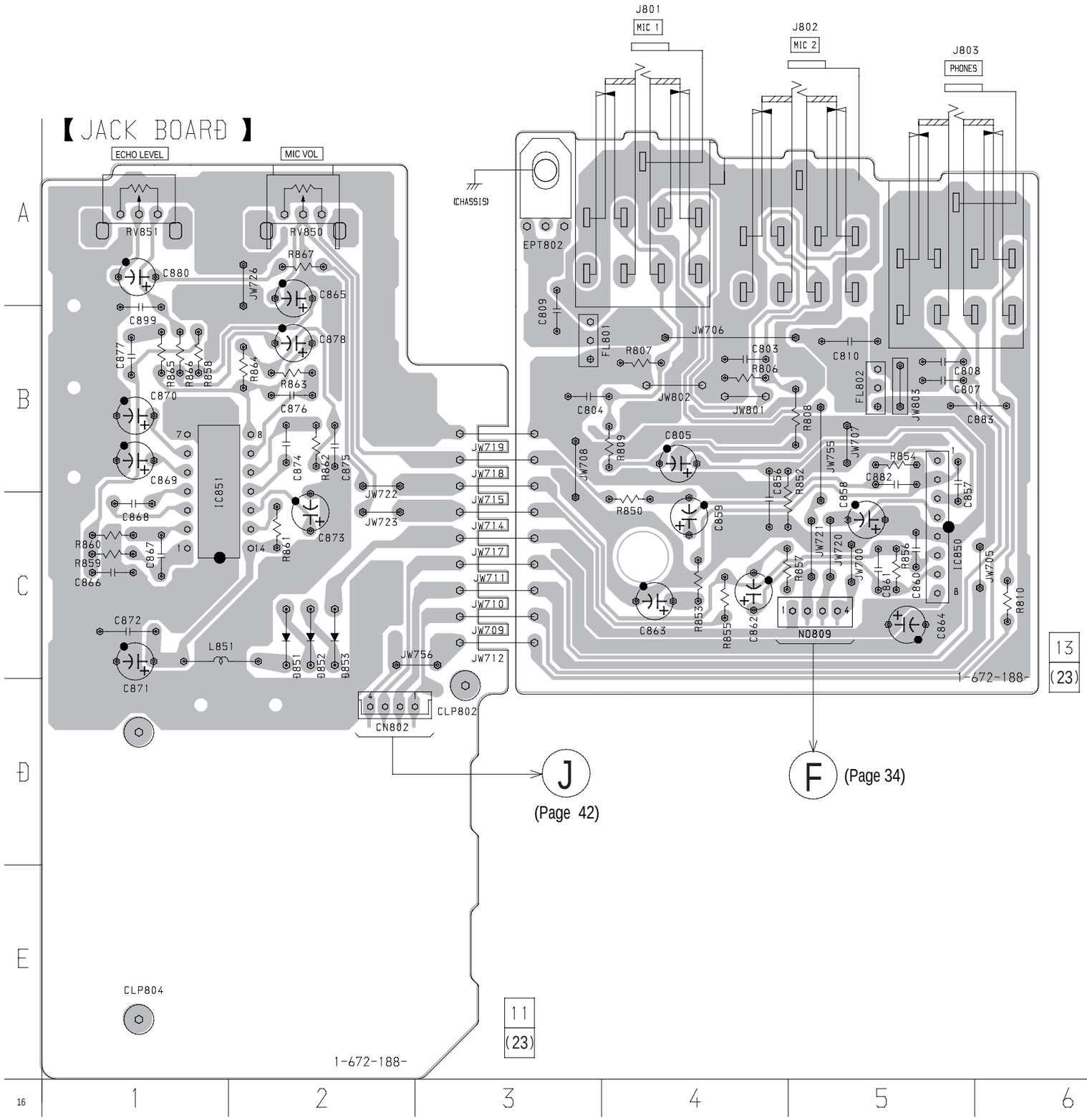
• Refer to page 60 for IC Block Diagrams.



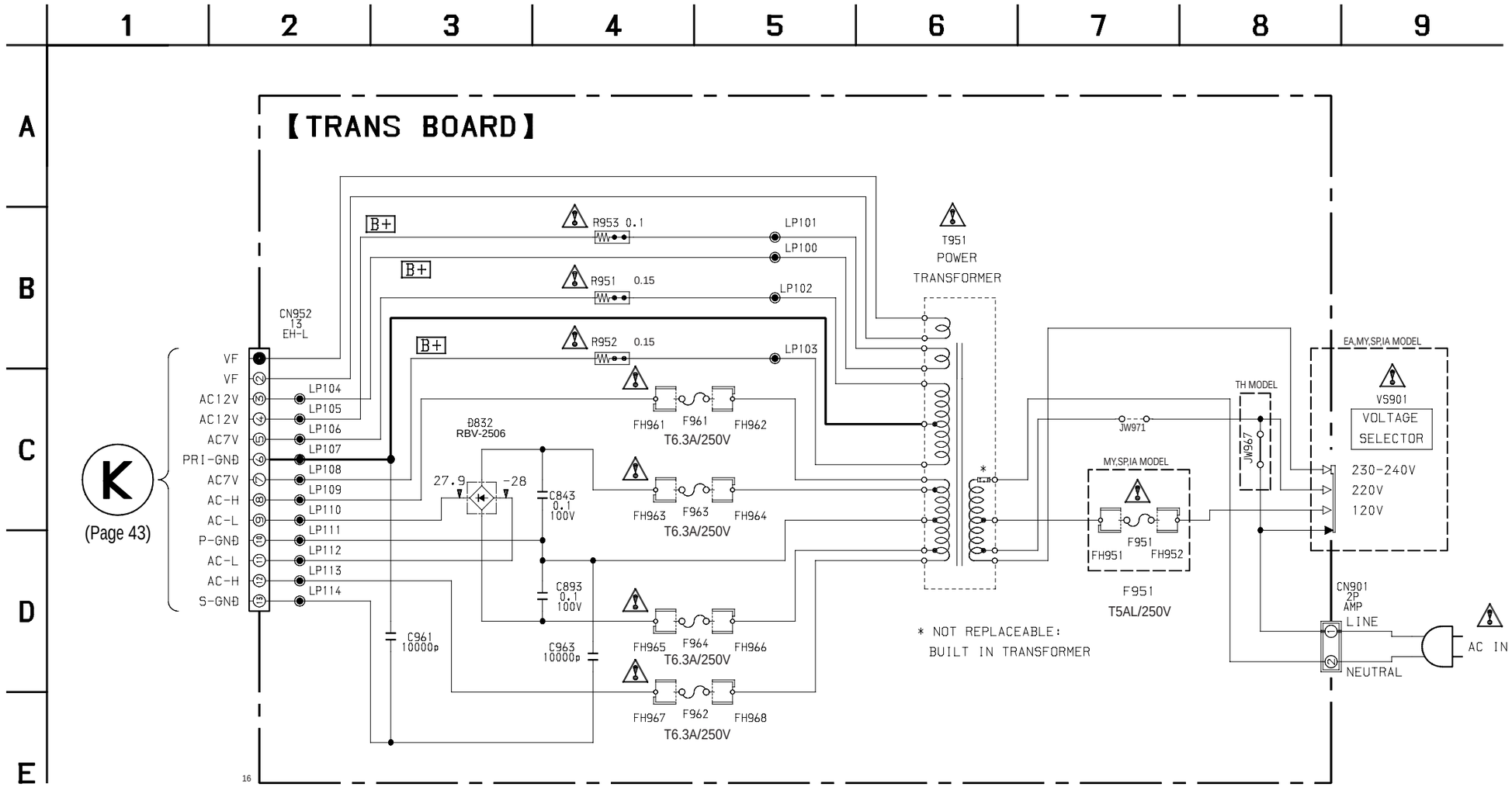
NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

6-33. PRINTED WIRING BOARD JACK SECTION • Refer to page 19 for Circuit Boards Location.



6-34. SCHEMATIC DIAGRAM TRANS SECTION



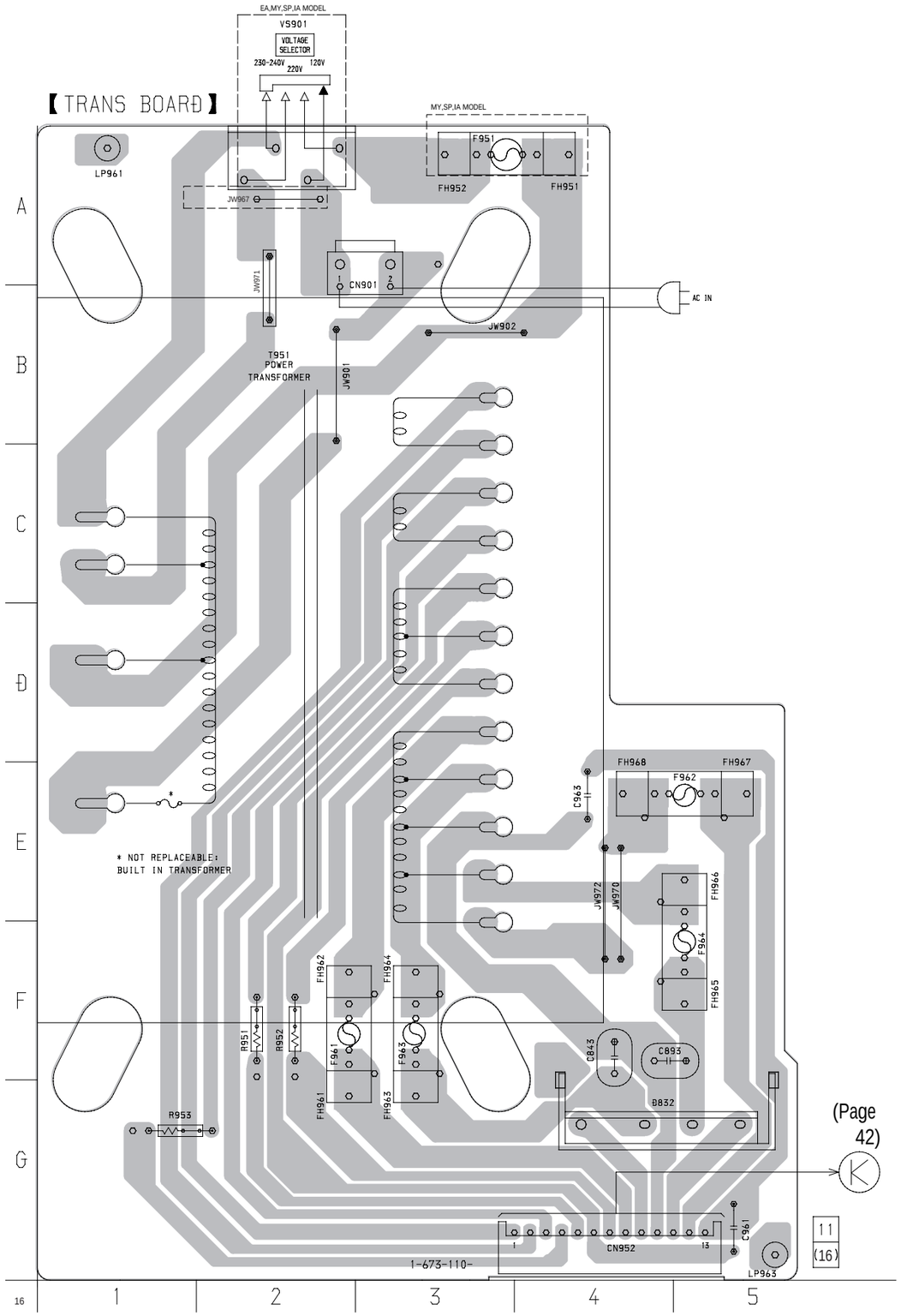
NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

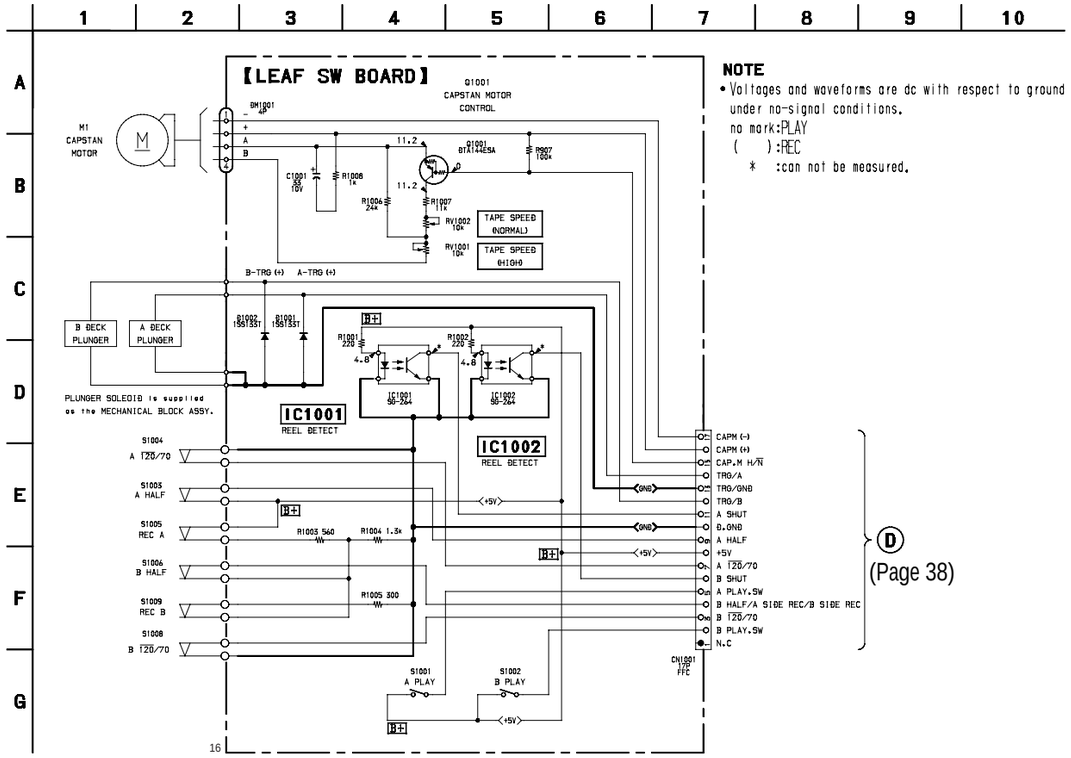
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

6-35. PRINTED WIRING BOARD TRANS SECTION

• Refer to page 19 for Circuit Boards Location.



6-36. SCHEMATIC DIAGRAM LEAF SW SECTION

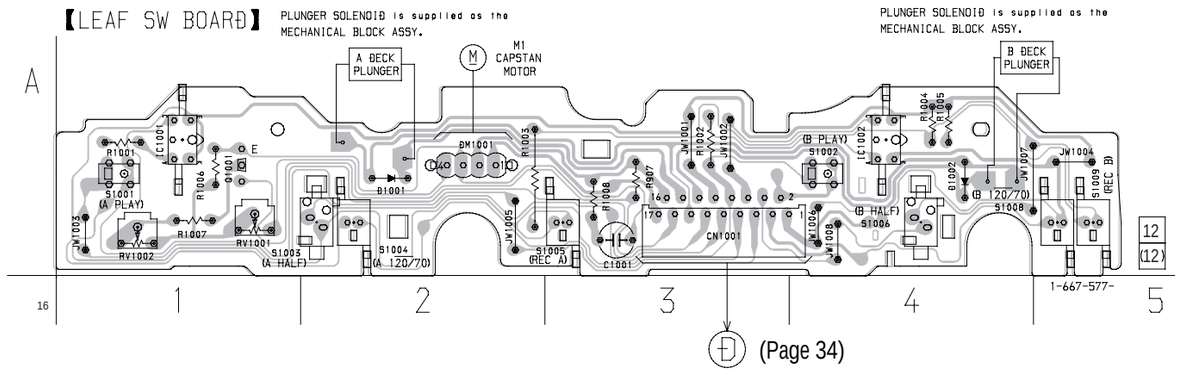


NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:PLAY
  ( ):REC
  * :can not be measured.

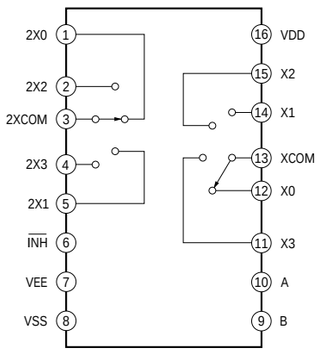
6-37. PRINTED WIRING BOARD LEAF SW SECTION

• Refer to page 19 for Circuit Boards Location.

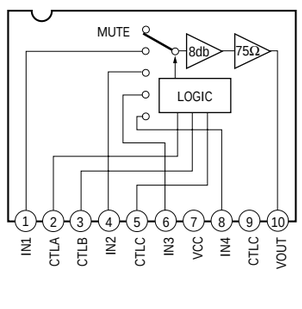


6-38. IC BLOCK DIAGRAMS

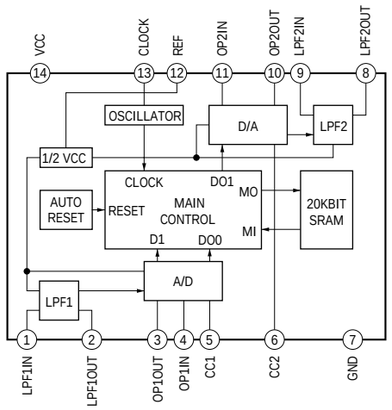
IC181 MC14052BF (MAIN (1/5) section)



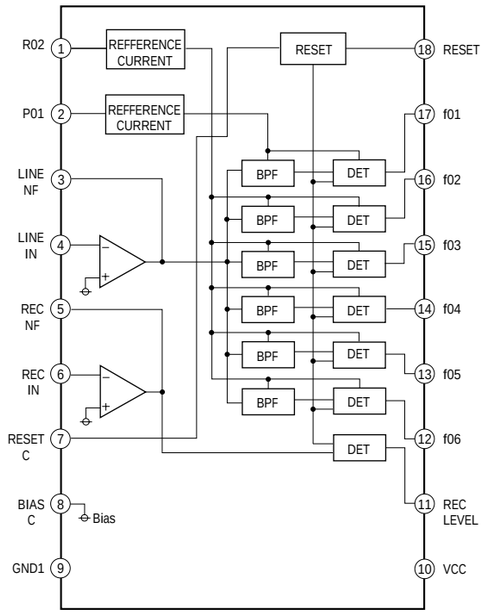
IC191 BA7615N (MAIN (1/5) section)



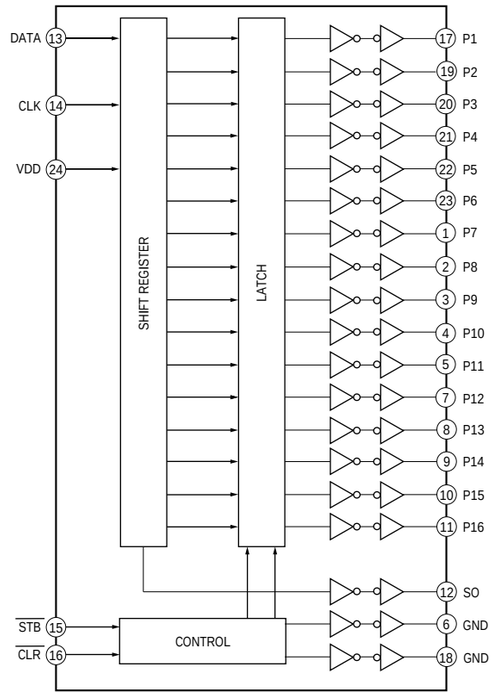
IC851 M65850P (JACK section)



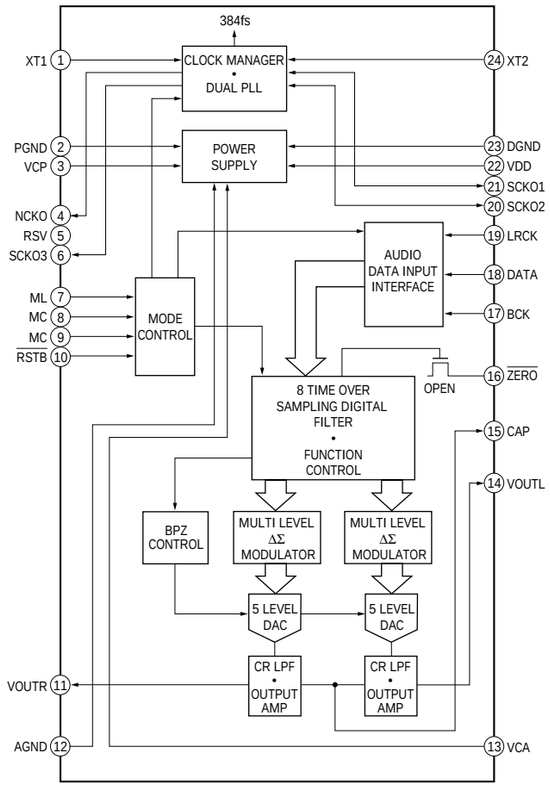
IC603 BA3830F (FL section)



IC604 NJU3716L (FL section)



IC509 PCM1727E-2T2 (VIDEO (3/3) section)



6-39. IC PIN FUNCTIONS

• IC501 MAIN CONTROL (M30622MA-A09FP) (MAIN board)

Pin No.	Pin Name	I/O	Function
1	POWER	O	Power amp ON/OFF signal output
2	POWER	O	Power ON/OFF signal output
3	F-RELAY	O	Front speaker relay control output
4	REAR-RELAY	O	Rear speaker relay control output
5	CD-POWER	O	CD power on signal output
6	LINE-MUTE	O	Line mute signal output
7	DBFB-H/L	O	DBFB H/L select signal output
8	—	—	Connected to ground
9	—	—	Connected to ground
10	XC-IN	I	X'tal (32.768 KHz) (SUB CLOCK)
11	XC-OUT	O	
12	RESET	I	System reset signal input
13	X-OUT	O	X'tal (16MHz) (MAIN SYSTEM CLOCK)
14	VSS	—	Ground
15	X-IN	I	X'tal (16MHz) (MAIN SYSTEM CLOCK)
16	VDD	—	Power supply (+5V)
17	NMI	I	Not used
18	WAKE UP	I	WAKE UP signal input
19	SCOR	I	CD Q-data request signal input
20	RDS-INT	I	RDS data interrupt input (Connected to ground)
21	RDS-DATA	I	RDS data interrupt input (Connected to ground)
22	AC-CUT	I	AC cut ON (L)/OFF (H) check
23	PL-CLK	O	Clock output to pro-logic (Not used)
24	PL-DATA	O	Data output to pro-logic (Not used)
25	PL-LAT	O	Latch signal output to pro-logic (Not used)
26	TIMER LED	O	Not used
27	PROTECT	I	Speaker protect signal input
28	V MUTE	O	Video mute signal output
29	IIC-CLK	O	I^2C SCL
30	IIC-DATA	O	I^2C SDA
31	—	—	Not used
32	SQ-DATA	I	Subcode Q data clock input (CD data)
33	SQ-CLK	O	Subcode Q data clock output (CD data clock)
34	SW-MODE	O	SW-MODE music/movie select signal output
35	CD-DATA	O	CD data output (Not used)
36	H/P IN	I	Head phone detect
37	CD-CLK	O	CD clock output (Not used)
38	493-LAT	O	Latch signal output for IC101 (M62493FP)
39	CLOCK-OUT	O	Clock out signal check
40	NO-USE	—	Not used
41	NO-USE	—	Not used
42	FL OFF	O	Fluorescent indicator tube filament on/off signal output
43	STBY RELAY	O	Main POWER on/off signal output
44	BASS FREQ	O	FREQ high/low signal output (Not used)
45	FUNC SEL 1	O	Function select signal output
46	FUNC SEL 0	O	Function select signal output
47	493-DATA	O	Data signal output for IC101 (M62493FP)
48	493-CLK	O	Clock signal output for IC101 (M62493FP)
49	ST-MUTE	O	Tuner mute signal output
50	STEREO	I	Stereo detection for tuner

Pin No.	Pin Name	I/O	Function
51	TUNED	I	Tuned detection for tuner
52	ST-CE	O	Tuner chip enable output
53	ST-DOUT	O	Tuner data output
54	ST-DIN	I	Tuner data input
55	ST-CLK	O	Tuner clock output
56	SENS	I	BD Condition signal input
57	HOLD	O	MODE signal output
58	XLT	O	CD latch signal output (Not used)
59	XRST	O	CD reset signal output
60	DISC-SENS	I	Slit sensor of disc table input (Connected to ground)
61	T-SENS	I	CD table detection signal input
62	VDD	—	Power supply (+5V)
63	TBL-L	O	Table motor control output
64	VSS	I	Ground
65	TBL-R	O	Table motor control output
66	LOAD-OUT	O	Loading motor control signal output (Not used)
67	LOAD-IN	O	Loading motor control signal input (Not used)
68	ENC 3/UP-SW	I	Disc tray UP signal input.
69	ENC 2/DISC-LED	I	Disc LED signal output
70	ENC 1	I	(Connected to ground)
71	OUT-OPEN	O	(Connected to ground) Loading out detection signal output
72	B-TRG	O	B deck trigger motor control output
73	A-TRG	O	A deck trigger motor control output
74	CAP-M-COT2	O	Capstan motor REW/FWD/STOP signal output
75	CAP-M-COT1	O	Capstan motor REW/FWD/STOP signal output
76	CAP-M-H/L	O	Capstan motor High/Low speed select signal output
77	AMS-IN	I	AMS signal input
78	TC-MUTE	O	TC line mute ON/OFF selection output
79	R/PB/PAS	O	REC/PB/PASS selection output
80	NR-ON/OFF	O	DOLBY NR ON/OFF signal output
81	REC-MUTE	O	REC mute ON/OFF selection output
82	BIAS	O	Bias ON/OFF signal output
83	EQ-H/N	O	Equalizer High/Normal select output
84	PB-A/B	O	PB A deck/B deck select output
85	ALC	O	ALC ON/OFF output signal
86	B-PLAY-SW	I	B deck play detect
87	A-PLAY-SW	I	A deck play detect
88	A-HALF	I	A Deck half detector signal input
89	B-HALF	I	B Deck half detector signal input
90	B-SHUT	I	B Deck reel pulse detector
91	A-SHUT	I	A Deck reel pulse detector
92	SOFT-TEST	O	Software test port (Not used)
93	HP-MUTE	O	Head phone mute signal output
94	KEY/CD-ADJ	I	KEY (use the jig)/CD adjust point port
95	MODEL IN	I	MODEL input
96	AVSS	—	Analog ground
97	SPEC-IN	I	Specifications input
98	VREF	I	Analog reference voltage input
99	AVCC	—	Analog power supply (+5V)
100	TC-RELAY	O	REC/PB head selection output for IC602

• IC502 MPEG DECODER, MECHANISM CONTROL (M30620MC-A05FP) (VIDEO BOARD)

Pin No.	Pin Name	I/O	Function
1	SENSE	I	Internal state (SENSE) monitor input (IC101)
2	SENSE CLK	O	Serial data reading clock output (IC101)
3	DSP DATA	O	Serial data output (IC101)
4	DSP LATCH	O	Latch output (IC101)
5	DSP CLK	O	Serial data clock output (IC101)
6	TSENS	I	Not used
7	REMOTE IN	I	Not used
8	BYTE	I	External bus width change input (Connected to ground)
9	VSS	–	Ground
10	DSP MUTE	O	Mute output (IC101) “H” : mute
11	CTRL1(L:DOUBLE)	O	Double change output (IC101) “L” : double
12	XRESET	I	System reset input “L” : reset
13	XOUT	O	Main clock output (10MHz)
14	VSS	–	Ground
15	XIN	I	Main clock input (10MHz)
16	VCC	–	+5V power supply
17	NMI	I	Requests mask disable interruption input (Connected to +5V)
18	SCOR	I	Subcode sync input (IC101)
19	D SENS	I	Not used
20	CL680 INT	I	Video CD interruption input (IC505)
21	CL680 HSEL	O	Video CD select data of the host MPU (IC505)
22	DF LATCH	O	Digital filter latch output (IC509)
23	CL680 HRDY	I	Ready signal input for communication to the host MPU (IC505)
24	680 RESET	O	Video CD reset output (IC505) “L” : reset
25	JOG1	I	Not used
26	JOG2	I	Not used
27	CTRL2	O	Double control output (IC101) “H” : double
28	LD ON	O	Laser diode ON/OFF output
29	IIC1	I/O	IIC convertion microcomputer receive data (Former type), IIC clock input from master control (New type)
30	IIC0	I/O	IIC convertion microcomputer transmittion data (Former type), IIC data input from master control (New type)
31	DATA1O	O	Serial 1 data output (IC505, 509)
32	DATA1I	I	Serial 1 data input (IC505, 509)
33	CLK1	O	Serial 1 clock output
34	SHARPNESS	O	Sharpness output L : normal, H : sharpness
35	XVLEVEL. DOWN	O	Fix the video signal output level output
36	SUBQ DATA	I	Serial 2 data input for subcode sync reading
37	SUBQ CLK	I	Serial 2 clock input for subcode sync reading
38	P. ON	I	Not used
39	BUS XRDY	I	Not used
40	BUS	I	Not used
41	BUS XHOLD	I	Not used
42, 43	BUS	I	Not used
44	BUS XRD	I	Model selection input “L” : chinese model, “H” : except chinese model
45	BUS	I	V sync signal input

Pin No.	Pin Name	I/O	Function
46	BUS XWRL	I	Not used
47	LO. BOOST	I	Not used
48	AUDIO MUTE	O	Audio mute output “L” : mute
49	LOAD OUT	I	Not used
50	LOAD IN	I	Not used
51	INSW	I	Not used
52	OUTSW	I	Not used
53	MODEL 1	I	L : System input (Fixed at “L”)
54	MODEL 2	I	L : System input (Fixed at “L”)
55	TBLL	I	Not used
56	TBLR	I	Not used
57	ENC 1	I	Not used
58	ENC 2	I	Not used
59	ENC 3	I	Not used
60	—	–	Not used
61	—	–	Not used
62	VCC	–	+5V power supply
63	—	–	Not used
64	VSS	–	Ground
65	A7	O	Video mute output “L”
66 to 71	A6 to A1	I	Not used
72	U to I	I	IIC convertion microcomputor transmittion input
73	TEST LED	O	TEST LED for MPEG decoder
74	TEST 1	I	Test mode for Video CD check
75	TEST 2	I	Test mode for servo check
76	TEST 3	I	Not used
77	DEVICE RESET	O	Device system rest output “L” : reset
78	STANDBY	I	Not used
79	FL CS	I	Not used
80	FL	I	Not used
81 to 88	D7 to D0	I	Not used
89	MIC CTRL	I	Not used
90	KEY 1	I	Not used
91	KEY 2	I	Not used
92	KEY 3	I	Not used
93	NY/PAL	I	NTSC/PAL select switch input
94	MUSIC VOL	I	Not used
95	KEY 4	I	Not used
96	AVSS	–	A/D converter ground
97	MODE. SW	I	Not used
98	VREF	I	A/D converter reference voltage input (Connected to +5V)
99	AVCC	–	A/D converter +5V power supply
100	AMP. ON	I	Not used

• IC505 CD DECODER, SYSTEM CONTROL (CL680T-D1) (VIDEO BOARD)

Pin No.	Pin Name	I/O	Function
1	NC	–	Not used
2	VSS	–	Ground
3	CD-BCK	I	CD Decode bit clock
4	CD-DATA	I	CD Decode data
5	CD-LRCK	I	CD Decode Left or Right channel selection clock
6	CD-C2PO	I	CD Decode C2 error data
7	NC	–	Not used
8	NC	–	Not used
9	NC	–	Not used
10	MD0	I/O	Data bus between Microcode ROM/DRAM and CL680
11	MD1	I/O	Data bus between Microcode ROM/DRAM and CL680
12	MD2	I/O	Data bus between Microcode ROM/DRAM and CL680
13	MD3	I/O	Data bus between Microcode ROM/DRAM and CL680
14	MD4	I/O	Data bus between Microcode ROM/DRAM and CL680
15	MD5	I/O	Data bus between Microcode ROM/DRAM and CL680
16	VSS	–	Ground
17	MD6	I/O	Data bus between Microcode ROM/DRAM and CL680
18	VDD3	–	+3.3V Power supply
19	MD7	I/O	Data bus between Microcode ROM/DRAM and CL680
20	VSS	–	Ground
21	MD8	I/O	Data bus between Microcode ROM/DRAM and CL680
22	VDD3	–	+3.3V Power supply
23	MD9	I/O	Data bus between Microcode ROM/DRAM and CL680
24	MD10	I/O	Data bus between Microcode ROM/DRAM and CL680
25	MD11	I/O	Data bus between Microcode ROM/DRAM and CL680
26	MD12	I/O	Data bus between Microcode ROM/DRAM and CL680
27	MD13	I/O	Data bus between Microcode ROM/DRAM and CL680
28	MD14	I/O	Data bus between Microcode ROM/DRAM and CL680
29	MD15	I/O	Data bus between Microcode ROM/DRAM and CL680
30	NC	–	Not used
31	NC	–	Not used
32	NC	–	Not used
33	NC	–	Not used
34	NC	–	Not used
35	NC	–	Not used
36	NC	–	Not used
37	$\overline{\text{MCE}}$	O	Chip enable signal to Microcode ROM
38	$\overline{\text{MWE}}$	O	Write enable signal to DRAM
39	VSS	–	Ground
40	CAS	O	Column address strove : Latch the column address to DRAM
41	VDD3	–	+3.3V power supply
42	RAS0	O	Row address strove : Latch row address to DRAM
43	RAS1	–	Not used
44	MA10	O	Address data from CL680 to Microcode ROM
45	MA9	O	Address data from CL680 to Microcode ROM

Pin No.	Pin Name	I/O	Function
46	MA8	O	Address data from CL680 to Microcode ROM/DRAM
47	VSS	–	Ground
48	MA7	O	Address data from CL680 to Microcode ROM/DRAM
49	VDD3	–	+3.3V Power supply
50	MA6	O	Address data from CL680 to Microcode ROM/DRAM
51	MA5	O	Address data from CL680 to Microcode ROM/DRAM
52	MA4	O	Address data from CL680 to Microcode ROM/DRAM
53	VSS	–	Ground
54	MA3	O	Address data from CL680 to Microcode ROM/DRAM
55	VDD3	–	+3.3V Power supply
56	MA2	O	Address data from CL680 to Microcode ROM/DRAM
57	MA1	O	Address data from CL680 to Microcode ROM/DRAM
58	MA0	O	Address data from CL680 to Microcode ROM/DRAM
59	PGIO7	I/O	Not used
60	$\overline{\text{RESET}}$	I	Reset signal input from the host MPU
61	VDDMAX-IN	I	Fix the maxium input voltage each input pin and I/O pin
62	NC	–	Not used
63	NC	–	Not used
64	NC	–	Not used
65	AGND DAC	–	Ground
66	AVDD DAC	–	+3.3V Power supply
67	COMPOS OUT	O	Not used
68	AGND DAC	–	Ground
69	Y-OUT	O	Luminance signal out
70	AVDD DAC	–	+3.3V Power supply
71	AGND DAC	–	Ground
72	RREF	I	Fix the video signal output level
73	(1.235V)VREF	O	Reference voltage (+1.235V)
74	AVDD DAC	–	+3.3V Power supply
75	C-OUT	O	Chrominance signal out
76	AGND DAC	–	Ground
77	(GCK INT)CLK SEL	I	GCK selection “H”; Internal, “L”; External
78	CLK SEL	I	DA-XCK selection (1)
79	CLK SEL	I	DA-XCK selection (2)
80	VSS	–	Ground
81	RESERVED	I	Selection the operation clock 42.336MHz
82	VDD3	–	+3.3V Power supply
83	DA-EMP	–	Not used
84	RESERVED	–	Not used
85	AGND PLL	–	Ground
86	DA-XCLK	I	Main reference clock input (16.9344MHz=384fs)
87	AVDD PLL	–	+3.3V
88	PGIO4	I/O	Not used
89	PGIO5	I/O	Not used
90	PGIO6	I/O	Not used

Pin No.	Pin Name	I/O	Function
91	PGIO0	I/O	Not used
92	PGIO8	I/O	Not used
93	PGIO2/$\overline{\text{VSYNC}}$/ CSYNC	O	Vertical synchronized signal of video signal
94	AVDD PLL	–	+3.3V Power supply
95	NC	–	Not used
96	NC	–	Not used
97	NC	–	Not used
98	AGND PLL	–	Ground
99	VSS	–	Ground
100	NC	–	Not used
101	PGIO3/$\overline{\text{HSYNC}}$	I/O	Not used
102	VDD3	–	+3.3V Power supply
103	PGIO1/VCK-OUT	I/O	Not used
104	VSS	–	Ground
105	GCK	I	Not used
106	VCK-IN	I	Main clock for video signal processer
107	GCKOUT/DA-EMP	O	Not used
108	DA-LRCK	O	Digital Audio Left or Right channel selection clock
109	VDDMAX-OUT	O	Fix the maxium output voltage certain output pins (Connected to +5V)
110	DA-DATA	O	Digital Audio data
111	DA-BCK	O	Digital Audio bit clock
112	HD-OUT	O	Serial Data output from CL680 to the host MPU
113	HRDY	O	Ready signal CL680 is ready for communication to the host MPU
114	$\overline{\text{HINT}}$	O	Request signal for interrupting the host MPU
115	CDG-SCK	I/O	Not used
116	VSS	–	Ground
117	HCK	I	Host clock : referance signal for the host bus interface
118	VDD3	–	+3.3V Power supply
119	HD-IN	I	Serial Data output ftom the host MPU to CL680
120	VDD3	–	+3.3V Power supply
121	HSEL	I	Select data or address of the host MPU
122	CDG-SDATA	I	Ground (Not used)
123	CDG-VFSY	I	Ground (Not used)
124	CDG-SOS1	I	Ground (Not used)
125	NC	–	Not used
126	NC	–	Not used
127	NC	–	Not used
128	NC	–	Not used

• **IC601 DISPLAY CONTROL (TMP88CS76F-6005) (FL board)**

Pin No.	Pin Name	I/O	Function
1	SIRCS	I	Remote commander signal input
2	JOG A	I	Rotary encoder (S702) pulse input
3	LED SCK	O	LED clock signal output
4	LED LATCH	O	LED latch signal output
5	LED DAT	O	LED serial data output
6	LED POWER	—	Not used
7	LED SEL	O	LED select signal output
8	JOG B	I	Rotary encoder (S702) pulse input
9	VOLUME A	I	Rotary encoder (S701) pulse input
10	VOLUME B	I	
11 to 15	KEY 0 to KEY 4	I	Key input
16 to 20	BPF 0 to BPF 4	I	Rec level signal input
21	ALL BAND	O	Rec level signal output for auto DBDF
22	WAKE UP	O	Gradation right/WAKE UP signal output
23	Vss	—	Ground
24	VAss	—	
25	VAref	I	Analog reference voltage input
26	VDD	–	Power supply (+5V)
27 to 40	GR 3 to GR 16	O	FL gride signal output
41	VDD VFT	—	Power supply (+5V) for VFT
42, 43	GR 1, GR 2	O	FL gride signal output
44	SEG 0	O	FL segment signal output (Not used)
45 to 67	SEG 1 to SEG 23	O	FL segment signal output
68	Vkk	—	Power supply (-25V) for FL segment signal output
69	Vdd	—	Power supply (+5V)
70	X in	I	X'tal (12.5MHz)
71	Vss	—	Ground
72	X out	O	X'tal (12.5MHz)
73	RESET	I	Reset signal input from main controller
74	DAILY LED	O	LED driver output
75	REC LED	O	
76	TEST	I	Connected ground
77	LED-ECO	O	LED driver output
78	I^2C DATA	I	I^2C SDA input from master controller
79	I^2C CLK	I	I^2C SCL input from master controller
80	D-SW	I	Door switch signal input

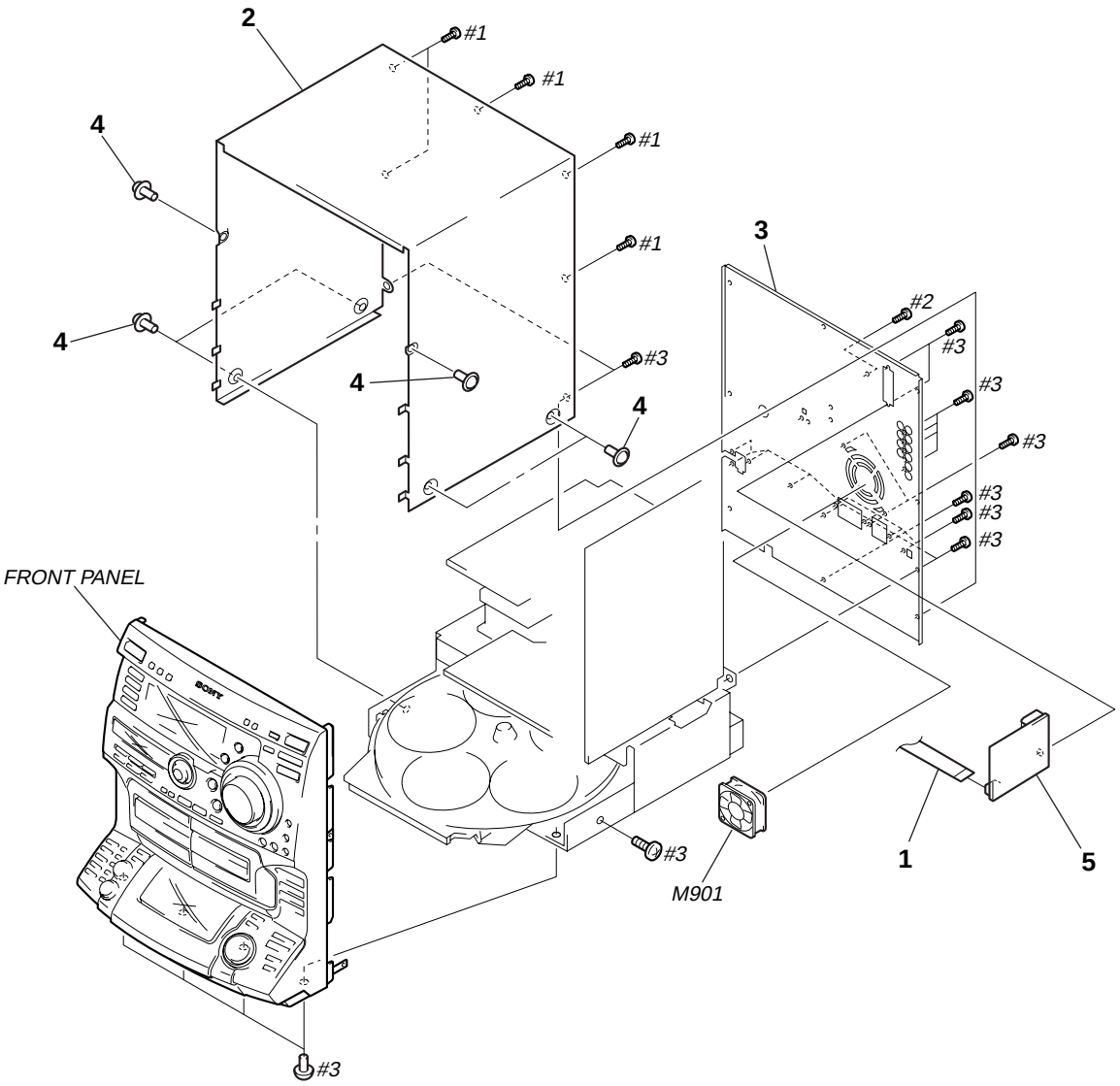
SECTION 7
EXPLODED VIEWS

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  IA : Indonesia model
  EA : Saudi Arabia model
  MY : Malaysia model
  SP : Singapore model
  TH : Thai model

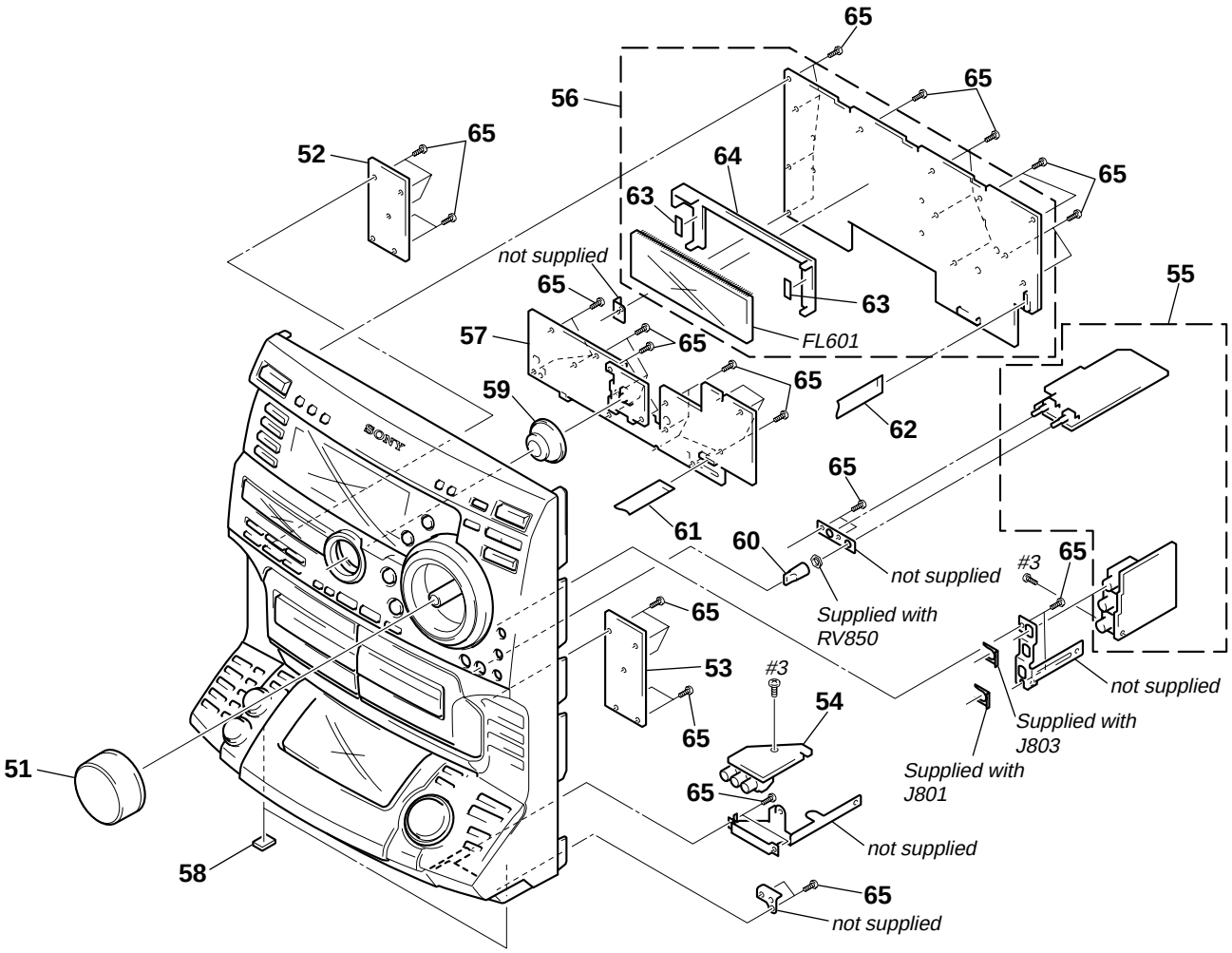
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

7-1. CASE AND BACK PANEL SECTION



Ref. No.	Part No.	Description	Remarks
1	1-769-977-11	WIRE(FLAT TYPE) (13 CORE) (150 mm)	
* 2	4-214-777-31	CASE	
3	4-214-793-01	PANEL, BACK (MY,SP)	
3	4-214-793-11	PANEL, BACK (EA)	
3	4-214-793-31	PANEL, BACK (IA)	
3	4-214-793-41	PANEL, BACK (TH)	
4	3-363-099-01	SCREW(CASE 3 TP2)	
5	1-233-545-11	TUNER(FM/AM)	
M901	1-698-792-11	FAN, DC	

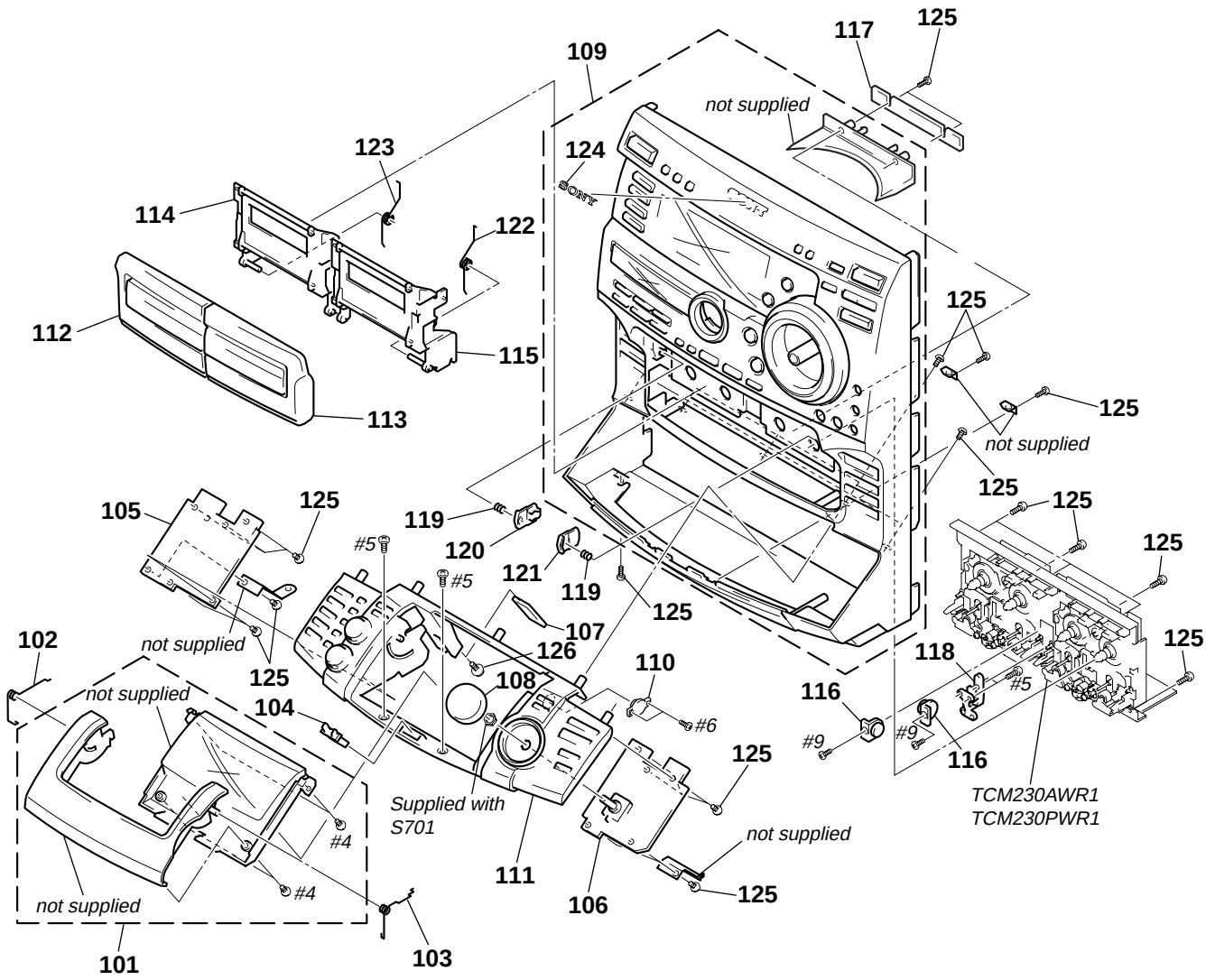
7-2. FRONT PANEL SECTION 1



Ref. No.	Part No.	Description	Remarks
51	4-214-716-01	KNOB(VOL)	
* 52	1-672-193-11	TC-A BOARD	
* 53	1-672-194-11	TC-B BOARD	
* 54	1-672-190-12	FRONT INPUT BOARD	
55	A-4417-554-A	JACK BOARD, COMPLETE	
56	A-4426-364-A	FL BOARD, COMPLETE (EA,MY,SP,IA)	
56	A-4426-808-A	FL BOARD, COMPLETE (TH)	
58	4-948-236-21	CUSHION (107)	
57	A-4417-488-A	PANEL-VR BOARD, COMPLETE	

Ref. No.	Part No.	Description	Remarks
59	4-214-717-01	CURSOR	
60	4-214-756-01	KNOB(MICROPHONE)	
61	1-773-002-11	WIRE(FLAT TYPE) (15 CORE) (80 mm)	
62	1-773-032-11	WIRE(FLAT TYPE) (15 CORE) (400 mm)	
* 63	4-949-935-81	CUSHION (FL)	
* 64	4-214-749-01	HOLDER (925), FL TUBE	
65	4-951-620-01	SCREW (2.6 × 8), +BVTP	
FL601	1-517-839-11	INDICATOR TUBE, FLUORESCENT	

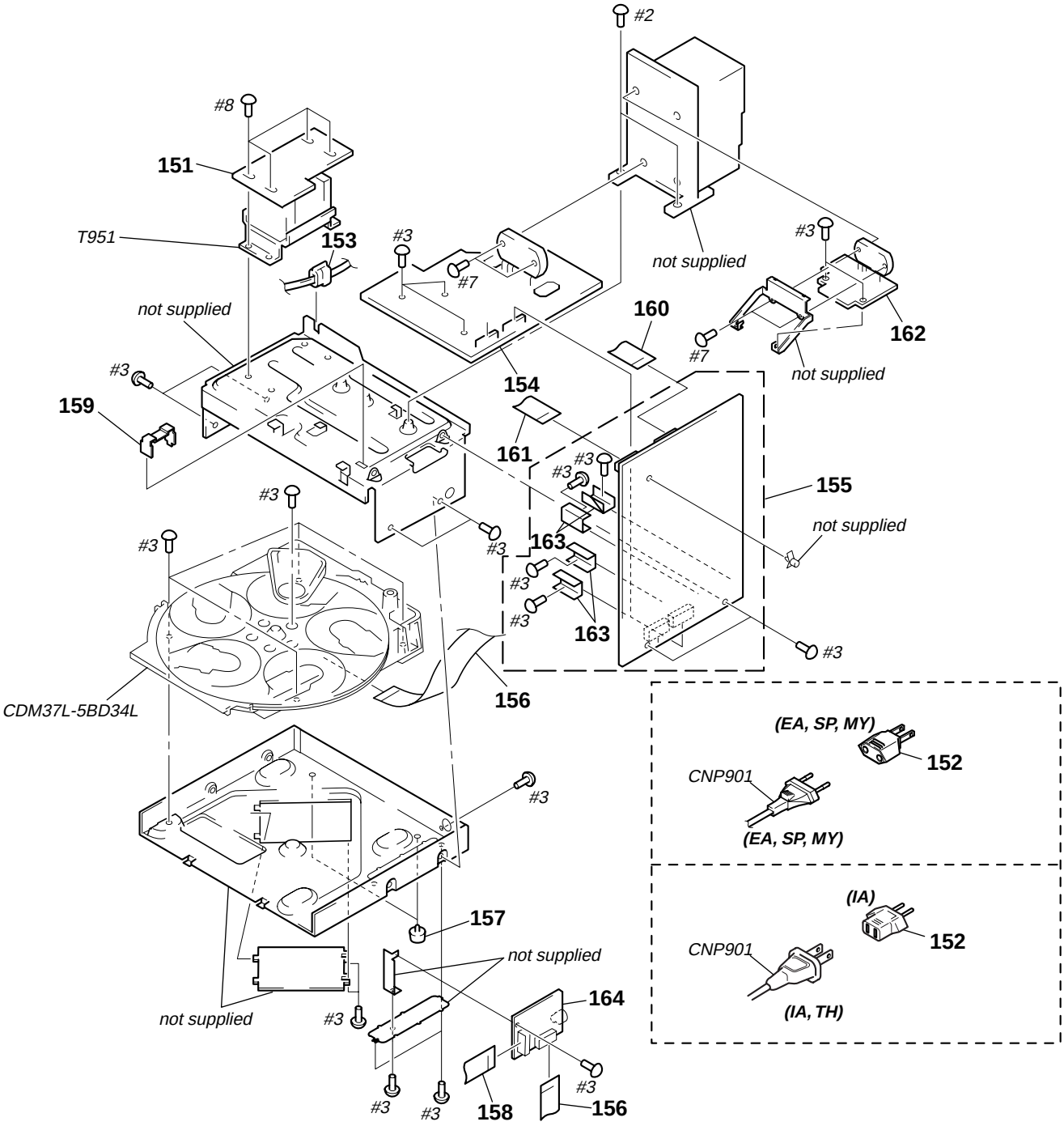
7-3. FRONT PANEL SECTION 2



Ref. No.	Part No.	Description	Remarks
101	X-4950-644-1	CD LID ASSY	
102	4-214-773-02	SPRING (CDL), TORSION	
103	4-214-774-02	SPRING (CDR), TORSION	
104	4-040-472-01	LATCH, D.C.	
* 105	1-672-186-12	CD-L BOARD	
* 106	1-672-187-12	CD-R BOARD	
* 107	1-672-191-12	DOOR-SW BOARD	
108	4-214-718-02	KNOB (CD)	
109	X-4950-648-1	PANEL ASSY	
* 110	3-973-975-21	DAMPER, OIL	
111	X-4950-643-1	PANEL ASSY, SUB	
112	X-4950-668-1	LID(A) ASSY, CASSETTE	
113	X-4950-639-1	LID(B) ASSY, CASSETTE	

Ref. No.	Part No.	Description	Remarks
114	X-4950-641-1	HOLDER (A) ASSY, CASSETTE	
115	X-4950-642-1	HOLDER (B) ASSY, CASSETTE	
116	4-215-062-01	DAMPER	
* 117	1-672-195-11	LED (PANEL) BOARD	
118	4-214-755-01	HOLDER (FULCRUM)	
119	4-214-775-03	SPRING, PUSH CATCHER RETURN	
120	4-214-760-11	CATCHER (A), PUSH	
121	4-214-761-11	CATCHER (B), PUSH	
122	4-214-769-01	SPRING (TCB), TORSION	
123	4-214-768-01	SPRING (TCA), TORSION	
124	4-214-759-01	EMBLEM (NO.6), SONY	
125	4-951-620-01	SCREW (2.6 × 8), +BVTP	
126	4-957-577-01	SCREW PTP WH (2.6 × 8) (DIA. 10)	

7-4. CHASSIS SECTION



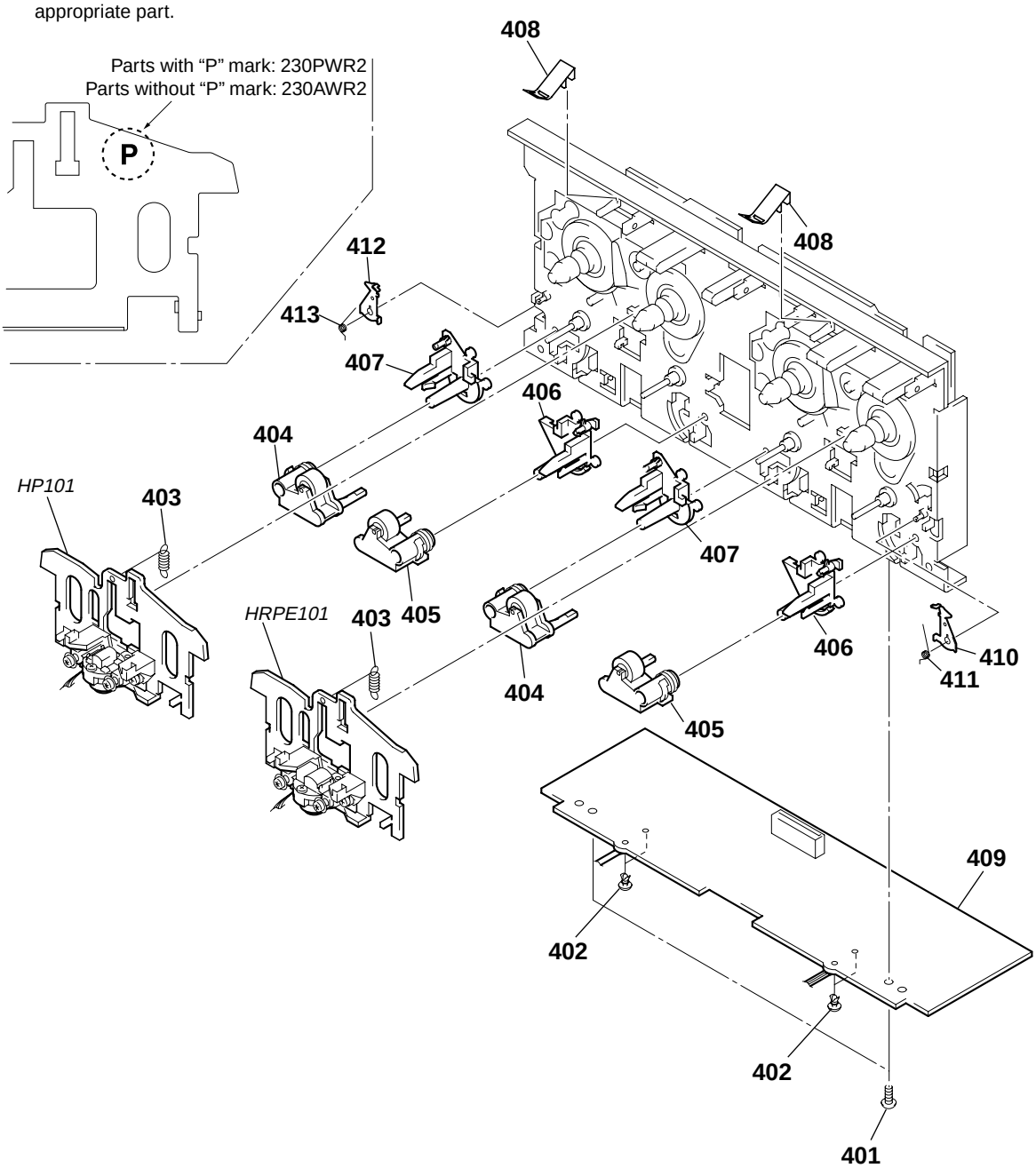
Ref. No.	Part No.	Description	Remarks
151	1-673-110-11	TRANS BOARD	
⚠152	1-569-007-11	ADAPTOR, CONVERSION 2P (IA)	
⚠152	1-569-008-21	ADAPTOR, CONVERSION 2P (EA,MY,SP)	
153	3-703-244-00	BUSHING (FBS001), CORD	
154	A-4417-494-A	PA BOARD, COMPLETE (EA,MY,SP,IA)	
154	A-4424-301-A	PA BOARD, COMPLETE (TH)	
155	A-4417-485-A	MAIN BOARD, COMPLETE (MY,SP,IA,TH)	
155	A-4419-724-A	MAIN BOARD, COMPLETE (EA)	
156	1-790-660-11	WIRE (FLAT TYPE) (23 CORE)	
157	X-4941-228-1	FOOT (F22125H-M)	

Ref. No.	Part No.	Description	Remarks
158	1-790-288-11	WIRE (FLAT TYPE) (13 CORE) (350 mm)	
160	1-773-006-11	WIRE (FLAT TYPE) (15 CORE) (120 mm)	
161	1-773-056-11	WIRE (FLAT TYPE) (17 CORE)	
* 162	A-4417-711-A	SURROUND AMP BOARD, COMPLETE	
163	4-875-327-31	HEAT SINK	
164	A-4724-725-A	VIDEO BOARD, COMPLETE (EA,MY,SP,IA)	
164	A-4724-929-A	VIDEO BOARD, COMPLETE (TH)	
⚠CNP901	1-558-943-41	CORD, POWER (TH,IA)	
⚠CNP901	1-575-651-21	CORD, POWER (EA,MY,SP)	
⚠T951	1-433-613-11	TRANSFORMER, POWER	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-5. TC MECHANISM SECTION 1 (TCM230AWR2/230PWR2)

*NOTE: Two types of parts which are not interchangeable are available for the Head deck (A) ASSY and Head deck (B) ASSY. When replacing the parts, refer to the following figure, and use the appropriate part.

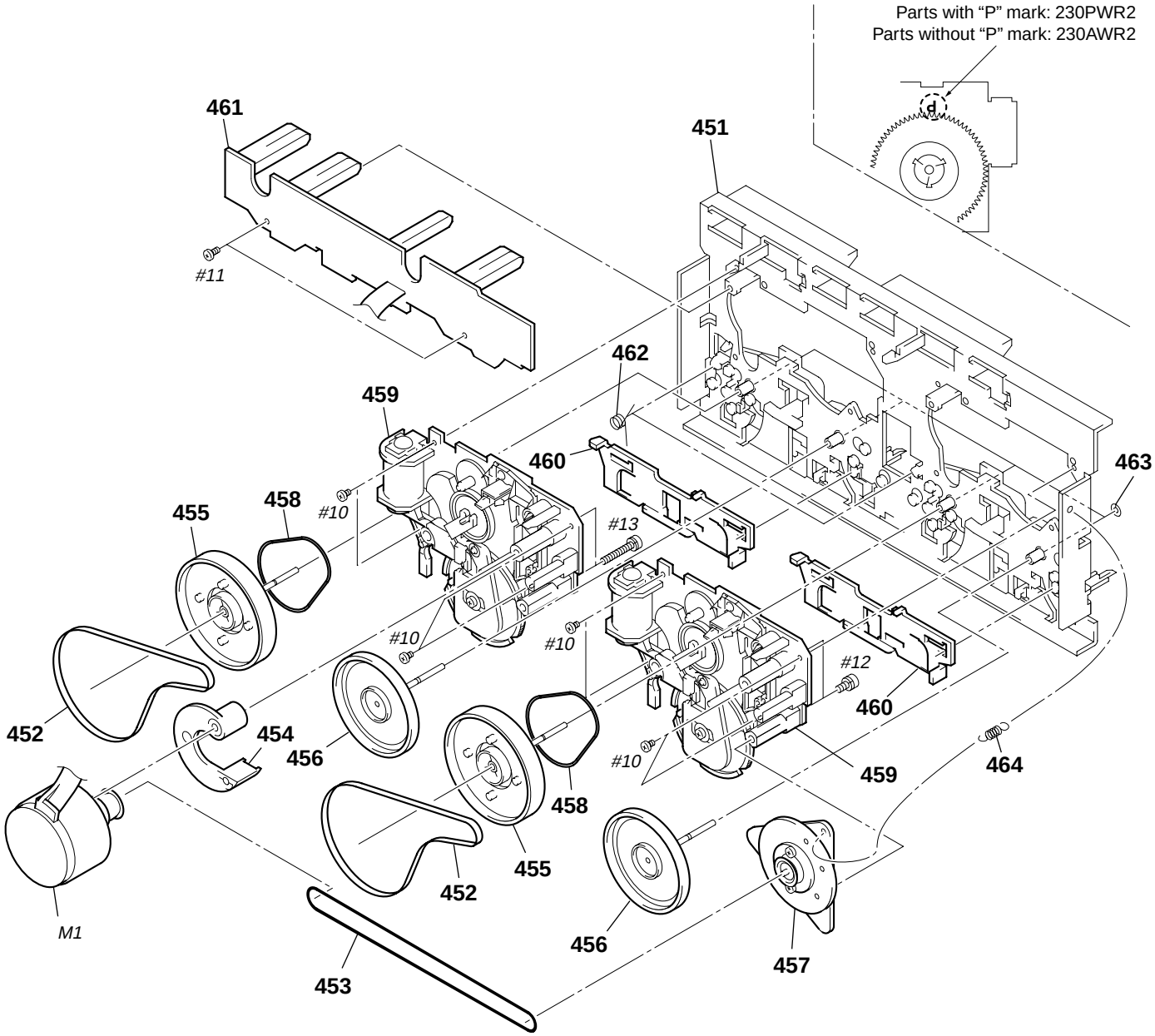


Ref. No.	Part No.	Description	Remarks
401	3-376-464-11	SCREW(+PTT 2.6 × 6),GROUND POINT	
402	3-911-116-42	RIVET, PUSH	
403	3-016-574-01	SPRING (HEAD), TENSION	
404	X-3374-156-4	PINCH LEVER (REV) ASSY	
405	X-3374-155-4	PINCH LEVER (FWD) ASSY	
406	3-017-365-01	BASE (PINCH LEVER FWD)	
407	3-017-366-01	BASE (PINCH LEVER REV)	
408	3-026-892-01	SPRING (CASSETTE), LEAF	
409	A-2007-799-A	AUDIO BOARD, COMPLETE	

Ref. No.	Part No.	Description	Remarks
410	3-016-573-03	LEVER (EJECT PREVENTION R)	
411	3-032-810-02	SPRING (R), TORSION	
412	3-016-572-01	LEVER (EJECT PREVENTION L)	
413	3-032-809-02	SPRING (L), TORSION	
HP101	A-2056-683-B	DECK (A) ASSY, HEAD (230PWR2)(*NOTE)	
HP101	A-2056-681-B	DECK (A) ASSY, HEAD (230AWR2)(*NOTE)	
HRPE101	A-2056-684-B	DECK (B) ASSY, HEAD (230PWR2)(*NOTE)	
HRPE101	A-2056-682-B	DECK (B) ASSY, HEAD (230AWR2)(*NOTE)	

7-6. TC MECHANISM SECTION 2 (TCM230AWR2/230PWR2)

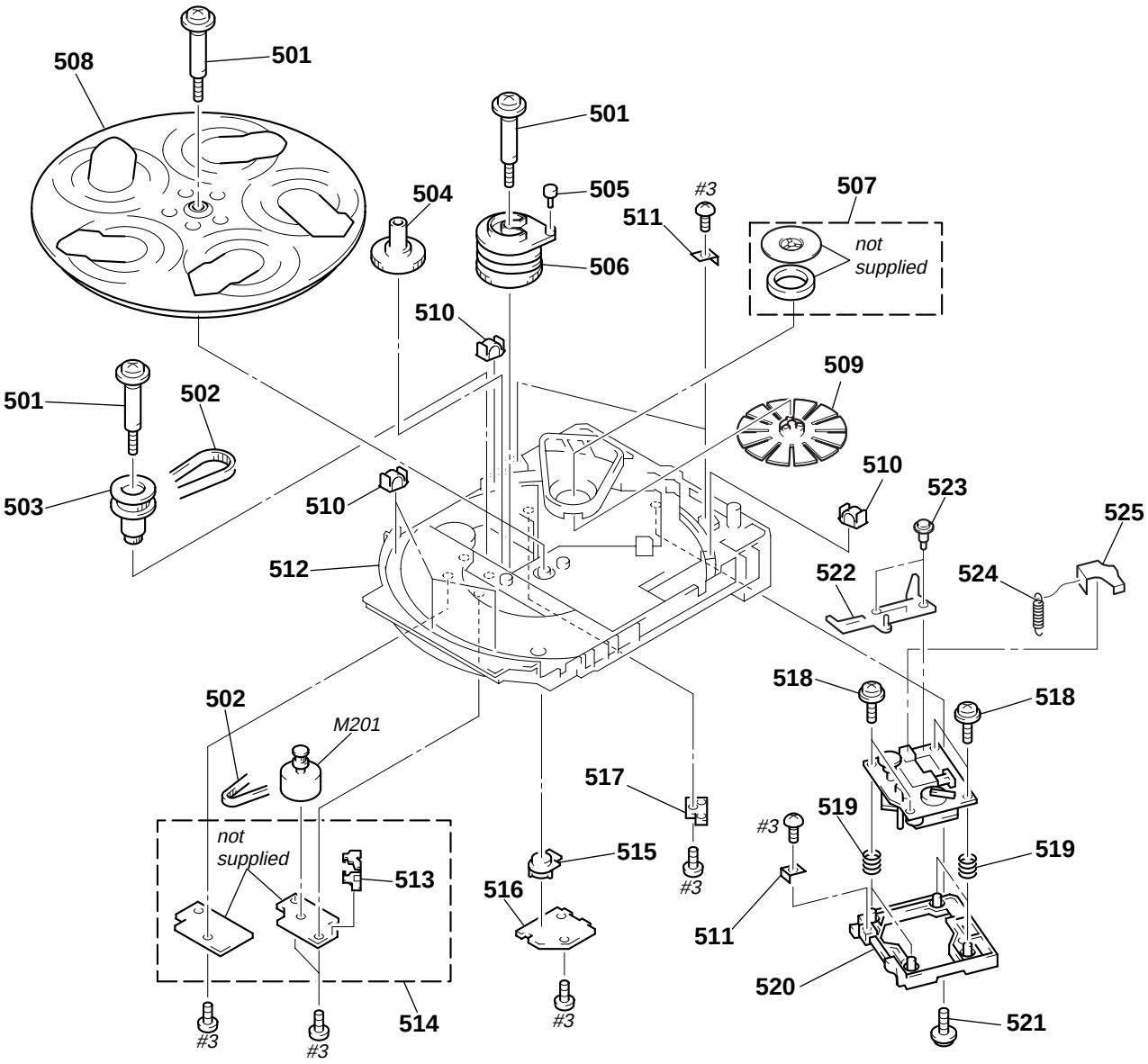
*NOTE: Two types of parts which are not interchangeable are available for the mechanical block assembly. When replacing the parts, refer to the following figure, and use the appropriate part.



Ref. No.	Part No.	Description	Remarks
451	X-3374-214-1	CHASSIS ASSY, MAIN	
452	3-016-570-01	BELT (CAPSTAN)	
453	3-016-569-01	BELT (TENSION)	
* 454	3-016-568-01	BRACKET (MOTOR)	
455	X-3374-075-5	FLYWHEEL (FWD) ASSY	
456	X-3374-076-1	FLYWHEEL (REV) ASSY	
457	X-3374-157-1	PULLEY ASSY, TENSION	
458	3-024-405-01	BELT (FR2)	

Ref. No.	Part No.	Description	Remarks
459	A-2004-629-A	MECHANICAL BLOCK ASSY(230AWR2)(*NOTE)	
459	A-2004-630-A	MECHANICAL BLOCK ASSY(230PWR2)(*NOTE)	
460	3-016-566-01	SLIDER, REVERSE	
461	A-2007-800-A	LEAF SW BOARD, COMPLETE	
462	3-016-575-01	SPRING, TORSION	
463	3-019-208-01	WASHER, STOPPER	
464	3-027-453-01	SPRING (GROUND), TENSION	
M1	A-2004-628-A	MOTOR ASSY, CAPSTAN	

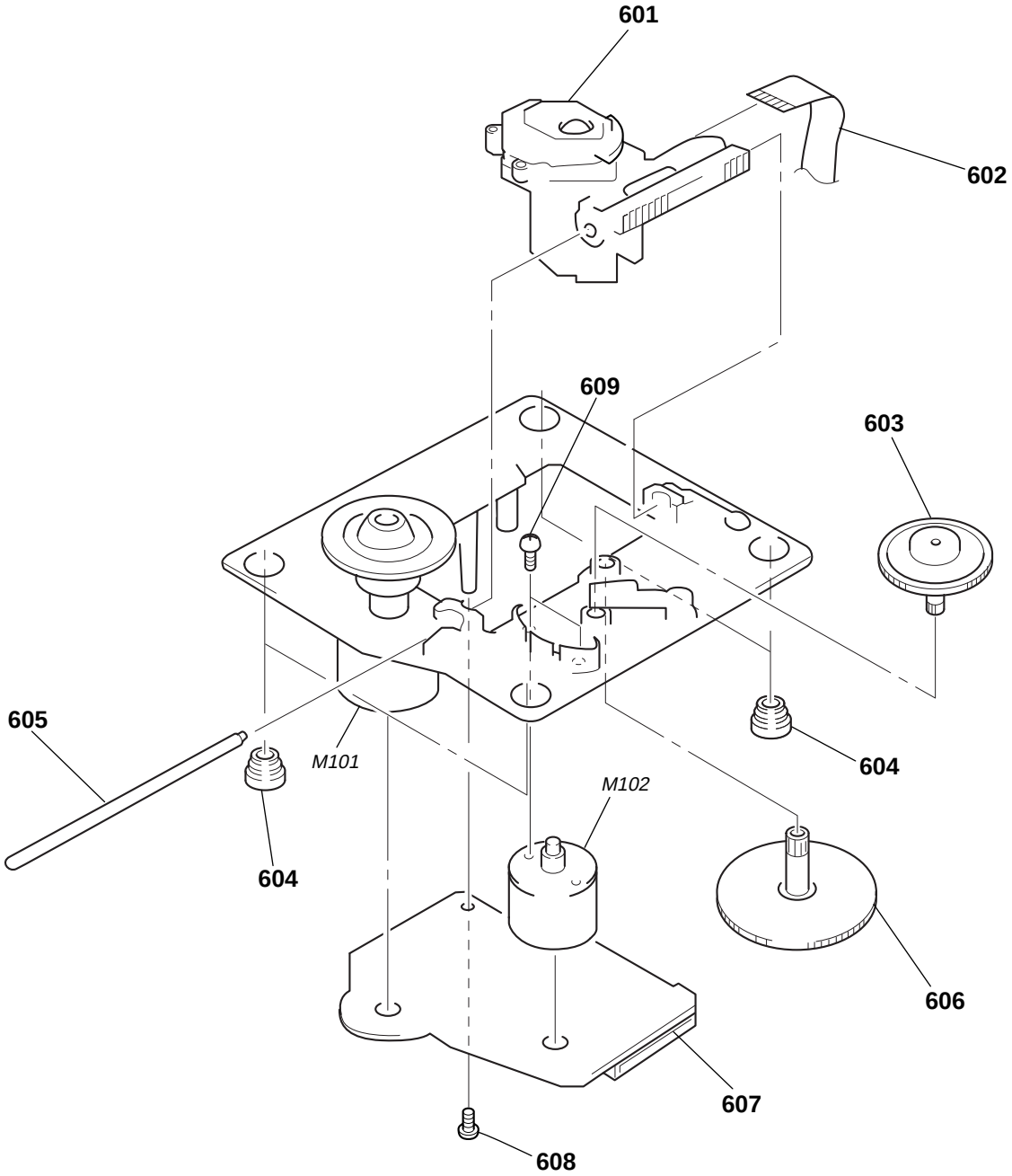
7-7. CD MECHANISM SECTION (CDM37M-5BD32L)



Ref. No.	Part No.	Description	Remarks
501	4-987-976-01	SCREW, STEP	
502	4-944-490-01	BELT (TIMING)	
503	A-4660-978-A	GEAR (PULLEY) ASSY	
504	4-978-421-01	GEAR (MID)	
505	4-978-425-01	ROLLER (CAM)	
506	4-978-420-01	CAM (HOLDER)	
507	1-452-925-21	MAGNET ASSY	
508	4-978-417-01	TABLE, DISC	
509	4-993-142-03	PULLEY (L), PRESS	
510	X-4947-960-1	ROLLER ASSY	
* 511	4-978-583-01	BRACKET (BU)	
512	4-978-418-01	CHASSIS	
* 513	4-980-385-01	HOLDER (SW)	

Ref. No.	Part No.	Description	Remarks
* 514	A-4673-765-A	CD MOTOR BOARD, COMPLETE	
515	4-978-426-01	INDICATOR (NO.)	
* 516	1-659-059-13	LED (CD) BOARD	
* 517	1-659-058-13	TABLE SENSOR BOARD	
518	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
519	4-958-593-01	SPRING (BU), COMPRESSION	
* 520	4-978-419-01	HOLDER (BU-5)	
521	4-998-716-01	SCREW, BU FITTING	
522	4-989-493-01	SLIDER (37)	
523	4-989-494-01	SCREW (SLIDER), STEP	
524	4-989-819-02	SPRING, TENSION	
525	4-989-491-01	COVER, LENS	
M201	A-4660-977-A	MOTOR ASSY (TABLE)	

7-8. BASE UNIT SECTION (BU-5BD32L)



Ref. No.	Part No.	Description	Remarks
⚠601	8-820-020-02	OPTICAL PICK-UP KSS-213D/Q-NP	
602	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
603	4-917-567-21	GEAR (M)	
604	4-951-940-01	INSULATOR (BU)	
605	4-917-565-01	SHAFT, SLED	
606	4-917-564-01	GEAR (P), FLATNESS	

Ref. No.	Part No.	Description	Remarks
607	A-4724-653-A	BD BOARD, COMPLETE	
608	4-951-620-01	SCREW (2.6 × 8), +BVTP	
609	3-713-786-51	SCREW +P 2 × 3	
M101	X-4917-523-3	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

SECTION 8
ELECTRICAL PARTS LIST

AUDIO

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: µF
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: µH
- Abbreviation
  IA : Indonesia model
  EA : Saudi Arabia model
  MY : Malaysia model
  SP : Singapore model
  TH : Thai model
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
	A-2007-799-A	AUDIO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C301	1-162-289-31	CERAMIC	390PF	10%	50V
C302	1-126-968-11	ELECT	100uF	20%	6.3V
C303	1-162-282-31	CERAMIC	100PF	10%	50V
C304	1-130-483-00	MYLAR	0.01uF	5%	50V
C305	1-107-715-11	ELECT	22uF	20%	16V
C311	1-162-289-31	CERAMIC	390PF	10%	50V
C313	1-162-282-31	CERAMIC	100PF	10%	50V
C314	1-130-487-00	MYLAR	0.022uF	5%	50V
C315	1-126-233-11	ELECT	22uF	20%	50V
C331	1-137-427-11	FILM	120PF	5%	50V
C332	1-162-288-31	CERAMIC	330PF	10%	50V
C333	1-162-209-31	CERAMIC	27PF	5%	50V
C401	1-162-289-31	CERAMIC	390PF	10%	50V
C402	1-126-968-11	ELECT	100uF	20%	6.3V
C403	1-162-282-31	CERAMIC	100PF	10%	50V
C404	1-130-483-00	MYLAR	0.01uF	5%	50V
C405	1-107-715-11	ELECT	22uF	20%	16V
C411	1-162-289-31	CERAMIC	390PF	10%	50V
C413	1-162-282-31	CERAMIC	100PF	10%	50V
C414	1-130-487-00	MYLAR	0.022uF	5%	50V
C415	1-126-233-11	ELECT	22uF	20%	50V
C431	1-137-427-11	FILM	120PF	5%	50V
C432	1-162-288-31	CERAMIC	330PF	10%	50V
C433	1-162-209-31	CERAMIC	27PF	5%	50V
C601	1-104-396-11	ELECT	10uF	20%	16V
C602	1-104-396-11	ELECT	10uF	20%	16V
C611	1-104-396-11	ELECT	10uF	20%	16V
C612	1-104-396-11	ELECT	10uF	20%	16V
C621	1-137-150-11	FILM	0.01uF	5%	100V
C622	1-126-961-11	ELECT	2.2uF	20%	50V
C623	1-136-155-00	FILM	0.015uF	5%	50V
C624	1-130-481-00	MYLAR	0.0068uF	5%	50V
C625	1-130-481-00	MYLAR	0.0068uF	5%	50V
C627	1-124-903-11	ELECT	1uF	20%	50V
C628	1-136-153-00	FILM	0.01uF	5%	50V
C642	1-104-664-11	ELECT	47uF	20%	16V
		< CONNECTOR >			
CN601	1-568-834-11	SOCKET, CONNECTOR 15P			

Ref. No.	Part No.	Description			Remarks
		< IC >			
IC601	8-759-111-44	IC uPC4570C-1			
IC602	8-759-143-54	IC uPC1330HA			
IC611	8-759-111-44	IC uPC4570C-1			
		< COIL >			
L331	1-410-780-11	INDUCTOR 27mH			
L431	1-410-780-11	INDUCTOR 27mH			
L601	1-414-193-41	INDUCTOR 220uH			
L602	1-414-193-41	INDUCTOR 220uH			
		< TRANSISTOR >			
Q621	8-729-142-46	TRANSISTOR 2SC2001TP-LK			
Q622	8-729-142-46	TRANSISTOR 2SC2001TP-LK			
Q623	8-729-801-93	TRANSISTOR 2SD1387-34-TP			
		< RESISTOR >			
R301	1-247-881-00	CARBON	120K	5%	1/4W
R302	1-247-815-91	CARBON	220	5%	1/4W
R303	1-247-863-91	CARBON	22K	5%	1/4W
R304	1-247-889-00	CARBON	270K	5%	1/4W
R305	1-247-858-11	CARBON	13K	5%	1/4W
R311	1-247-881-00	CARBON	120K	5%	1/4W
R312	1-247-807-31	CARBON	100	5%	1/4W
R314	1-247-882-11	CARBON	130K	5%	1/4W
R315	1-247-850-11	CARBON	6.2K	5%	1/4W
R331	1-249-430-11	CARBON	12K	5%	1/4W
R401	1-247-881-00	CARBON	120K	5%	1/4W
R402	1-247-815-91	CARBON	220	5%	1/4W
R403	1-247-863-91	CARBON	22K	5%	1/4W
R404	1-247-889-00	CARBON	270K	5%	1/4W
R405	1-247-858-11	CARBON	13K	5%	1/4W
R411	1-247-881-00	CARBON	120K	5%	1/4W
R412	1-247-807-31	CARBON	100	5%	1/4W
R414	1-247-882-11	CARBON	130K	5%	1/4W
R415	1-247-850-11	CARBON	6.2K	5%	1/4W
R431	1-249-430-11	CARBON	12K	5%	1/4W
R601	1-247-815-91	CARBON	220	5%	1/4W
R602	1-247-815-91	CARBON	220	5%	1/4W
R608	1-247-815-91	CARBON	220	5%	1/4W
R609	1-247-863-91	CARBON	22K	5%	1/4W
R611	1-247-815-91	CARBON	220	5%	1/4W

AUDIO BD

Ref. No.	Part No.	Description			Remarks
R612	1-247-815-91	CARBON	220	5%	1/4W
⚠R621	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
⚠R622	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
R623	1-249-432-11	CARBON	18K	5%	1/4W
R624	1-249-432-11	CARBON	18K	5%	1/4W
R625	1-249-429-11	CARBON	10K	5%	1/4W
		< VARIABLE RESISTOR >			
RV301	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV311	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV341	1-241-768-11	RES, ADJ, CARBON 220K			
RV401	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV411	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV441	1-241-768-11	RES, ADJ, CARBON 220K			
		< TRANSFORMER >			
T621	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			
**********					
	A-4724-653-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C102	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C103	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C105	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C106	1-164-346-11	CERAMIC CHIP	1uF		16V
C107	1-164-346-11	CERAMIC CHIP	1uF		16V
C108	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C109	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C110	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C111	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C112	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C113	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C115	1-126-607-11	ELECT CHIP	47uF	20%	4V
C116	1-126-607-11	ELECT CHIP	47uF	20%	4V
C117	1-126-209-11	ELECT CHIP	100uF	20%	4V
C118	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C119	1-163-110-00	CERAMIC CHIP	51PF	5%	50V
C120	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C121	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C122	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C123	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C124	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C126	1-124-779-00	ELECT CHIP	10uF	20%	16V
C130	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C140	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C141	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C151	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C153	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C154	1-110-501-11	CERAMIC CHIP	0.33uF	10%	16V
C156	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C157	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C159	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C161	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C162	1-128-065-11	ELECT CHIP	68uF	20%	10V
C170	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C171	1-163-038-91	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description			Remarks
		< CONNECTOR >			
CN101	1-770-706-11	CONNECTOR, FFC/FPC 23P			
CN102	1-777-937-11	CONNECTOR, FFC/FPC 16P			
		< IC >			
IC101	8-752-397-42	IC CXD3008Q			
IC102	8-759-549-28	IC BA5974FP-E2			
IC103	8-752-085-51	IC CXA2568M-T6			
IC104	8-759-398-25	IC TC7SH04F(TE85L)			
		< COIL >			
L101	1-414-234-22	INDUCTOR CHIP 0uH			
L102	1-410-377-31	INDUCTOR CHIP 4.7uH			
		< TRANSISTOR >			
Q101	8-729-010-08	TRANSISTOR MSB710-RT1			
		< RESISTOR >			
R101	1-216-077-00	METAL CHIP	15K	5%	1/10W
R102	1-216-097-91	RES,CHIP	100K	5%	1/10W
R103	1-216-077-00	METAL CHIP	15K	5%	1/10W
R104	1-216-085-00	METAL CHIP	33K	5%	1/10W
R105	1-216-073-00	METAL CHIP	10K	5%	1/10W
R106	1-216-049-91	RES,CHIP	1K	5%	1/10W
R107	1-216-073-00	METAL CHIP	10K	5%	1/10W
R108	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R109	1-216-121-91	RES,CHIP	1M	5%	1/10W
R110	1-216-295-91	SHORT 0			
R112	1-216-049-91	RES,CHIP	1K	5%	1/10W
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W
R124	1-216-097-91	RES,CHIP	100K	5%	1/10W
R125	1-216-037-00	METAL CHIP	330	5%	1/10W
R126	1-216-037-00	METAL CHIP	330	5%	1/10W
R127	1-216-037-00	METAL CHIP	330	5%	1/10W
R131	1-216-037-00	METAL CHIP	330	5%	1/10W
R135	1-216-295-91	SHORT 0			
R136	1-216-295-91	SHORT 0			
R137	1-216-295-91	SHORT 0			
R138	1-216-295-91	SHORT 0			
R143	1-216-103-00	METAL CHIP	180K	5%	1/10W
R144	1-216-103-00	METAL CHIP	180K	5%	1/10W
R145	1-216-121-91	RES,CHIP	1M	5%	1/10W
R146	1-216-121-91	RES,CHIP	1M	5%	1/10W
R147	1-216-041-00	METAL CHIP	470	5%	1/10W
R148	1-216-001-00	METAL CHIP	10	5%	1/10W
R149	1-216-003-11	RES,CHIP	12	5%	1/10W
R150	1-216-073-00	METAL CHIP	10K	5%	1/10W
R154	1-216-025-91	RES,CHIP	100	5%	1/10W
R155	1-216-025-91	RES,CHIP	100	5%	1/10W
R156	1-216-025-91	RES,CHIP	100	5%	1/10W
R157	1-216-025-91	RES,CHIP	100	5%	1/10W
R158	1-216-111-00	METAL CHIP	390K	5%	1/10W
R159	1-216-089-91	RES,CHIP	47K	5%	1/10W
R161	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R162	1-216-101-00	METAL CHIP	150K	5%	1/10W
R171	1-216-025-91	RES,CHIP	100	5%	1/10W
R172	1-216-025-91	RES,CHIP	100	5%	1/10W
R173	1-216-025-91	RES,CHIP	100	5%	1/10W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
R175	1-216-025-91	RES,CHIP	100	5%	1/10W
R203	1-216-025-91	RES,CHIP	100	5%	1/10W
R204	1-216-025-91	RES,CHIP	100	5%	1/10W
R205	1-216-025-91	RES,CHIP	100	5%	1/10W
R206	1-216-295-91	SHORT 0			
		< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT)			
**********					
*	A-4673-765-A	CD MOTOR BOARD, COMPLETE			
		**********			
*	4-980-385-01	HOLDER (SW)			
		< CAPACITOR >			
C201	1-124-907-11	ELECT	10uF	20%	50V
C202	1-164-159-21	CERAMIC	0.1uF		50V
C203	1-124-907-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
* CN201	1-568-947-11	PIN, CONNECTOR 9P			
		< IC >			
IC201	8-759-365-94	IC TA8409S			
		< COIL >			
L201	1-408-117-00	INDUCTOR 10uH			
		< RESISTOR >			
R205	1-249-427-11	CARBON	6.8K	5%	1/4W F
R206	1-249-425-11	CARBON	4.7K	5%	1/4W F
		< SWITCH >			
S201	1-762-587-11	SWITCH, PUSH (1 KEY) (UP SWITCH)			
**********					
*	1-672-186-12	CD-L BOARD			
		**********			
		< CONNECTOR >			
* CN812	1-568-944-11	PIN, CONNECTOR 6P			
		< DIODE >			
D641	8-719-058-04	DIODE SEL5223S-TP15 (NON-STOP)			
		< RESISTOR >			
R731	1-249-410-11	CARBON	270	5%	1/4W F
R732	1-249-411-11	CARBON	330	5%	1/4W
R733	1-249-413-11	CARBON	470	5%	1/4W F
R734	1-249-414-11	CARBON	560	5%	1/4W F
R735	1-249-415-11	CARBON	680	5%	1/4W F
R736	1-249-417-11	CARBON	1K	5%	1/4W F
R737	1-249-418-11	CARBON	1.2K	5%	1/4W F
R738	1-249-420-11	CARBON	1.8K	5%	1/4W F
R739	1-249-422-11	CARBON	2.7K	5%	1/4W F
R740	1-247-843-11	CARBON	3.3K	5%	1/4W

Ref. No.	Part No.	Description			Remarks
R741	1-249-425-11	CARBON	4.7K	5%	1/4W F
R742	1-249-427-11	CARBON	6.8K	5%	1/4W F
R743	1-249-429-11	CARBON	10K	5%	1/4W
R744	1-249-431-11	CARBON	15K	5%	1/4W
R745	1-249-407-11	CARBON	150	5%	1/4W F
		< SWITCH >			
S660	1-554-303-21	SWITCH, TACTILE (KEY-CON b)			
S661	1-554-303-21	SWITCH, TACTILE (DISC 1)			
S662	1-554-303-21	SWITCH, TACTILE (DISC 2)			
S663	1-554-303-21	SWITCH, TACTILE (DISC 3)			
S664	1-554-303-21	SWITCH, TACTILE (DISC 4)			
S665	1-554-303-21	SWITCH, TACTILE (DISC 5)			
S666	1-554-303-21	SWITCH, TACTILE (FLASH)			
S667	1-554-303-21	SWITCH, TACTILE (NEXT)			
S668	1-554-303-21	SWITCH, TACTILE (PREV)			
S669	1-554-303-21	SWITCH, TACTILE (RETURN)			
S670	1-554-303-21	SWITCH, TACTILE (SELECT)			
S671	1-554-303-21	SWITCH, TACTILE (ACTIVE)			
S672	1-554-303-21	SWITCH, TACTILE (EDIT)			
S673	1-554-303-21	SWITCH, TACTILE (NON-STOP)			
S674	1-554-303-21	SWITCH, TACTILE (LOOP)			
**********					
*	1-672-187-12	CD-R BOARD			
		**********			
		< CAPACITOR >			
C613	1-162-306-11	CERAMIC	0.01uF	30%	16V
C614	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
CN703	1-785-333-11	PIN, CONNECTOR (LIGHT ANGLE)7P			
		< DIODE >			
D700	8-719-056-13	DIODE SML79423C-TP15 (PLAY PAUSE)			
		< RESISTOR >			
R751	1-247-843-11	CARBON	3.3K	5%	1/4W
R752	1-249-425-11	CARBON	4.7K	5%	1/4W F
R753	1-249-427-11	CARBON	6.8K	5%	1/4W F
R754	1-249-429-11	CARBON	10K	5%	1/4W
R755	1-249-431-11	CARBON	15K	5%	1/4W
R756	1-249-434-11	CARBON	27K	5%	1/4W
R757	1-249-438-11	CARBON	56K	5%	1/4W
R758	1-247-804-11	CARBON	75	5%	1/4W
R759	1-247-804-11	CARBON	75	5%	1/4W
		< SWITCH >			
S676	1-554-303-21	SWITCH, TACTILE (PLAY MODE)			
S677	1-554-303-21	SWITCH, TACTILE (REPEAT)			
S678	1-554-303-21	SWITCH, TACTILE (REW)			
S679	1-554-303-21	SWITCH, TACTILE (FF)			
S681	1-554-303-21	SWITCH, TACTILE (PLAY MODE)			
S682	1-554-303-21	SWITCH, TACTILE (STOP)			
S683	1-554-303-21	SWITCH, TACTILE (DISC SKIP)			
S702	1-473-534-11	ENCODER, ROTARY (AMS)			
**********					

DOOR SW FL

Ref. No.	Part No.	Description			Remarks
*	1-672-191-12	DOOR-SW BOARD			
		**********			
		< CAPACITOR >			
C691	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< SWITCH >			
S691	1-771-057-11	SWITCH, PUSH (1 KEY) (OPEN)			
**********					
	A-4426-364-A	FL BOARD, COMPLETE (EA,MY,SP,IA)			
		**********			
	A-4426-808-A	FL BOARD, COMPLETE (TH)			
		**********			
*	4-214-749-01	HOLDER (925), FL TUBE			
*	4-949-935-81	CUSHION (FL)			
		< CAPACITOR >			
C601	1-104-664-11	ELECT	47uF	20%	10V
C602	1-162-306-11	CERAMIC	0.01uF	30%	16V
C604	1-126-960-11	ELECT	1uF	20%	50V
C606	1-126-960-11	ELECT	1uF	20%	50V
C608	1-104-665-11	ELECT	100uF	20%	10V
C609	1-162-294-31	CERAMIC	0.001uF	10%	50V
C610	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C611	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C612	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C613	1-104-664-11	ELECT	47uF	20%	16V
C616	1-162-294-31	CERAMIC	0.001uF	10%	50V
C617	1-162-306-11	CERAMIC	0.01uF	30%	16V
C621	1-126-964-11	ELECT	10uF	20%	50V
C622	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C623	1-126-964-11	ELECT	10uF	20%	50V
C624	1-104-664-11	ELECT	47uF	20%	16V
C625	1-126-963-11	ELECT	4.7uF	20%	50V
C626	1-126-964-11	ELECT	10uF	20%	50V
C641	1-162-286-21	CERAMIC	220PF	10%	50V
C642	1-162-286-21	CERAMIC	220PF	10%	50V
C643	1-162-286-21	CERAMIC	220PF	10%	50V
C644	1-162-286-21	CERAMIC	220PF	10%	50V
C645	1-162-286-21	CERAMIC	220PF	10%	50V
C646	1-162-286-21	CERAMIC	220PF	10%	50V
C647	1-162-286-21	CERAMIC	220PF	10%	50V
C648	1-162-286-21	CERAMIC	220PF	10%	50V
C649	1-162-286-21	CERAMIC	220PF	10%	50V
C650	1-162-286-21	CERAMIC	220PF	10%	50V
C651	1-162-286-21	CERAMIC	220PF	10%	50V
C652	1-162-286-21	CERAMIC	220PF	10%	50V
C653	1-162-286-21	CERAMIC	220PF	10%	50V
C654	1-162-286-21	CERAMIC	220PF	10%	50V
C655	1-162-286-21	CERAMIC	220PF	10%	50V
C656	1-162-286-21	CERAMIC	220PF	10%	50V
		< CONNECTOR >			
CN601	1-784-776-11	CONNECTOR, FFC 15P			
CN602	1-784-737-11	CONNECTOR, FFC 15P			

Ref. No.	Part No.	Description			Remarks
		< DIODE >			
D601	8-719-071-44	DIODE SELS5223C-TP15 (STAND-BY)			
D602	8-719-058-04	DIODE SEL5223S-TP15 (DAILY)			
D603	8-719-058-04	DIODE SEL5223S-TP15 (REC)			
D604	8-719-058-04	DIODE SEL5223S-TP15 (SYNC EQ)			
D605	8-719-058-04	DIODE SEL5223S-TP15 (SYNC BASS)			
D606	8-719-058-03	DIODE SEL5423E-TP15 (TUNER/BAND)			
D607	8-719-058-04	DIODE SEL5223S-TP15 (ENTER/NEXT)			
D608	8-719-050-84	DIODE RB441Q-40T-77			
		< FILTER >			
FL601	1-517-839-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC601	8-759-589-14	IC TMP88CS76F-6005			
IC602	8-759-459-86	IC NJL64H400A			
IC603	8-759-083-77	IC BA3830F			
IC604	8-759-567-59	IC NJU3716L			
		< COIL >			
L601	1-410-517-11	INDUCTOR 47uH			
L602	1-410-517-11	INDUCTOR 47uH			
L603	1-410-517-11	INDUCTOR 47uH			
L604	1-410-509-11	INDUCTOR 10uH			
		< LINE FILTER >			
LF601	1-424-228-11	FILTER, NOISE			
		< TRANSISTOR >			
Q601	8-729-620-05	TRANSISTOR 2SC2603TP-EF			
Q602	8-729-118-00	TRANSISTOR 2SB1116-TP-LK			
Q603	8-729-118-00	TRANSISTOR 2SB1116-TP-LK			
Q605	8-729-029-23	TRANSISTOR DTA114TSA-TP			
Q606	8-729-029-23	TRANSISTOR DTA114TSA-TP			
Q607	8-729-029-23	TRANSISTOR DTA114TSA-TP			
Q608	8-729-047-58	TRANSISTOR DTC114TLTL2			
Q609	8-729-047-58	TRANSISTOR DTC114TLTL2			
Q610	8-729-047-58	TRANSISTOR DTC114TLTL2			
		< RESISTOR >			
R601	1-247-893-11	CARBON	390K	5%	1/4W
R602	1-247-893-11	CARBON	390K	5%	1/4W
R603	1-249-441-11	CARBON	100K	5%	1/4W
R604	1-249-441-11	CARBON	100K	5%	1/4W
R605	1-247-807-31	CARBON	100	5%	1/4W
R608	1-249-435-11	CARBON	33K	5%	1/4W
R609	1-247-895-91	CARBON	470K	5%	1/4W
R610	1-249-401-11	CARBON	47	5%	1/4W F
R611	1-249-429-11	CARBON	10K	5%	1/4W
R612	1-247-807-31	CARBON	100	5%	1/4W
R613	1-247-807-31	CARBON	100	5%	1/4W
R614	1-247-807-31	CARBON	100	5%	1/4W
R615	1-249-429-11	CARBON	10K	5%	1/4W
R616	1-249-429-11	CARBON	10K	5%	1/4W
R617	1-249-429-11	CARBON	10K	5%	1/4W
R618	1-249-429-11	CARBON	10K	5%	1/4W
R619	1-249-429-11	CARBON	10K	5%	1/4W
R620	1-249-429-11	CARBON	10K	5%	1/4W
R621	1-249-429-11	CARBON	10K	5%	1/4W
R622	1-249-429-11	CARBON	10K	5%	1/4W

Ref. No.	Part No.	Description			Remarks
R623	1-247-903-00	CARBON	1M	5%	1/4W
R624	1-247-807-31	CARBON	100	5%	1/4W
R625	1-247-807-31	CARBON	100	5%	1/4W
R626	1-249-429-11	CARBON	10K	5%	1/4W (TH)
R627	1-247-807-31	CARBON	100	5%	1/4W
R628	1-249-429-11	CARBON	10K	5%	1/4W (TH)
R629	1-247-807-31	CARBON	100	5%	1/4W
R630	1-249-429-11	CARBON	10K	5%	1/4W
R631	1-249-410-11	CARBON	270	5%	1/4W F
R632	1-249-411-11	CARBON	330	5%	1/4W
R633	1-249-413-11	CARBON	470	5%	1/4W F
R634	1-249-414-11	CARBON	560	5%	1/4W F
R635	1-249-415-11	CARBON	680	5%	1/4W F
R636	1-249-417-11	CARBON	1K	5%	1/4W F
R637	1-249-418-11	CARBON	1.2K	5%	1/4W F
R638	1-249-420-11	CARBON	1.8K	5%	1/4W F
R639	1-249-422-11	CARBON	2.7K	5%	1/4W F
R640	1-247-843-11	CARBON	3.3K	5%	1/4W
R641	1-249-425-11	CARBON	4.7K	5%	1/4W F
R642	1-249-427-11	CARBON	6.8K	5%	1/4W F
R643	1-249-429-11	CARBON	10K	5%	1/4W
R644	1-249-431-11	CARBON	15K	5%	1/4W
R645	1-249-434-11	CARBON	27K	5%	1/4W
R647	1-249-410-11	CARBON	270	5%	1/4W F
R648	1-249-411-11	CARBON	330	5%	1/4W
R649	1-249-413-11	CARBON	470	5%	1/4W F
R650	1-249-414-11	CARBON	560	5%	1/4W F
R651	1-249-415-11	CARBON	680	5%	1/4W F
R652	1-249-437-11	CARBON	47K	5%	1/4W
R653	1-249-417-11	CARBON	1K	5%	1/4W F
R654	1-249-437-11	CARBON	47K	5%	1/4W
R655	1-249-417-11	CARBON	1K	5%	1/4W F
R656	1-249-438-11	CARBON	56K	5%	1/4W
R659	1-249-411-11	CARBON	330	5%	1/4W
R660	1-249-411-11	CARBON	330	5%	1/4W
R661	1-249-412-11	CARBON	390	5%	1/4W F
R662	1-249-407-11	CARBON	150	5%	1/4W F
R663	1-247-804-11	CARBON	75	5%	1/4W
R664	1-249-407-11	CARBON	150	5%	1/4W F
R665	1-249-441-11	CARBON	100K	5%	1/4W
R666	1-249-441-11	CARBON	100K	5%	1/4W
R667	1-249-441-11	CARBON	100K	5%	1/4W
R668	1-249-429-11	CARBON	10K	5%	1/4W
R669	1-249-393-11	CARBON	10	5%	1/4W F
R670	1-249-393-11	CARBON	10	5%	1/4W F
R671	1-249-393-11	CARBON	10	5%	1/4W F
R672	1-249-393-11	CARBON	10	5%	1/4W F
R673	1-249-393-11	CARBON	10	5%	1/4W F
R674	1-249-393-11	CARBON	10	5%	1/4W F
R675	1-249-393-11	CARBON	10	5%	1/4W F
R676	1-249-393-11	CARBON	10	5%	1/4W F
R677	1-249-393-11	CARBON	10	5%	1/4W F
R678	1-249-393-11	CARBON	10	5%	1/4W F
R679	1-249-393-11	CARBON	10	5%	1/4W F
R680	1-249-420-11	CARBON	1.8K	5%	1/4W F
R681	1-249-440-11	CARBON	82K	5%	1/4W
R682	1-249-420-11	CARBON	1.8K	5%	1/4W F
R683	1-249-437-11	CARBON	47K	5%	1/4W
R684	1-249-440-11	CARBON	82K	5%	1/4W
R685	1-249-429-11	CARBON	10K	5%	1/4W
R696	1-249-429-11	CARBON	10K	5%	1/4W
R698	1-249-429-11	CARBON	10K	5%	1/4W
		< SWITCH >			
S601	1-554-303-21	SWITCH, TACTILE (POWER SAVE/DEMO(STANDBY))			
S602	1-554-303-21	SWITCH, TACTILE (ECHO)			
S603	1-554-303-21	SWITCH, TACTILE (DISPLAY)			
S604	1-554-303-21	SWITCH, TACTILE (SPECTRUM ANALYZER)			
S606	1-554-303-21	SWITCH, TACTILE (TUNING/MODE)			
S607	1-554-303-21	SWITCH, TACTILE (STEREO/MONO)			
S608	1-554-303-21	SWITCH, TACTILE (ENTER/NEXT)			
S609	1-554-303-21	SWITCH, TACTILE (TUNING/BAND)			
S610	1-554-303-21	SWITCH, TACTILE (TUNING +)			
S611	1-554-303-21	SWITCH, TACTILE (TUNING -)			
S612	1-554-303-21	SWITCH, TACTILE (FUNCTION)			
S613	1-554-303-21	SWITCH, TACTILE (TUNER MEMORY)			
S614	1-554-303-21	SWITCH, TACTILE (SYNC EQ)			
S615	1-554-303-21	SWITCH, TACTILE (SYNC BASS)			
S617	1-554-303-21	SWITCH, TACTILE (DAILY)			
S618	1-554-303-21	SWITCH, TACTILE (REC)			
S619	1-554-303-21	SWITCH, TACTILE (SLEEP)			
S620	1-554-303-21	SWITCH, TACTILE (TIMER/CLOCK SET)			
		< VIBRATOR >			
X601	1-781-312-11	VIBRATOR, CERAMIC 12.5MHz			
**********					
*	1-672-190-12	FRONT INPUT BOARD			
		**********			
		< CAPACITOR >			
C801	1-162-294-31	CERAMIC	0.001uF	10%	50V
C802	1-162-294-31	CERAMIC	0.001uF	10%	50V
C811	1-162-282-31	CERAMIC	100PF	10%	50V
C812	1-164-159-21	CERAMIC	0.1uF		50V
C813	1-126-960-11	ELECT	1uF	20%	50V
		< FILTER >			
FL803	1-424-228-11	FILTER, NOISE			
		< JACK >			
J804	1-764-592-41	JACK 3P (VIDEO 2)			
		< RESISTOR >			
R801	1-249-417-11	CARBON	1K	5%	1/4W F
R802	1-249-437-11	CARBON	47K	5%	1/4W
R803	1-249-417-11	CARBON	1K	5%	1/4W F
R804	1-249-437-11	CARBON	47K	5%	1/4W
R805	1-247-804-11	CARBON	75	5%	1/4W
**********					

JACK LEAF SW

Ref. No.	Part No.	Description			Remarks
	A-4417-554-A	JACK BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C803	1-162-306-11	CERAMIC	0.01uF	30%	16V
C804	1-162-306-11	CERAMIC	0.01uF	30%	16V
C805	1-126-957-11	ELECT	0.22uF	20%	50V
C807	1-162-294-31	CERAMIC	0.001uF	10%	50V
C808	1-162-294-31	CERAMIC	0.001uF	10%	50V
C809	1-164-159-21	CERAMIC	0.1uF		50V
C810	1-164-159-21	CERAMIC	0.1uF		50V
C856	1-162-294-31	CERAMIC	0.001uF	10%	50V
C857	1-162-286-21	CERAMIC	220PF	10%	50V
C858	1-126-964-11	ELECT	10uF	20%	50V
C859	1-126-961-11	ELECT	2.2uF	20%	50V
C860	1-162-215-31	CERAMIC	47PF	5%	50V
C861	1-162-282-31	CERAMIC	100PF	10%	50V
C862	1-126-961-11	ELECT	2.2uF	20%	50V
C863	1-126-960-11	ELECT	1uF	20%	50V
C864	1-126-964-11	ELECT	10uF	20%	50V
C865	1-126-960-11	ELECT	1uF	20%	50V
C866	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C867	1-162-294-31	CERAMIC	0.001uF	10%	50V
C868	1-136-495-11	FILM	0.068uF	5%	50V
C869	1-126-959-11	ELECT	0.47uF	20%	50V
C870	1-126-959-11	ELECT	0.47uF	20%	50V
C871	1-126-967-11	ELECT	47uF	20%	50V
C872	1-162-306-11	CERAMIC	0.01uF	30%	16V
C873	1-104-664-11	ELECT	47uF	20%	25V
C874	1-136-495-11	FILM	0.068uF	5%	50V
C875	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C876	1-162-294-31	CERAMIC	0.001uF	10%	50V
C877	1-136-167-00	FILM	0.15uF	5%	50V
C878	1-126-960-11	ELECT	1uF	20%	50V
C879	1-161-494-00	CERAMIC	0.022uF		25V
C880	1-126-961-11	ELECT	2.2uF	20%	50V
C882	1-162-290-31	CERAMIC	470PF	10%	50V
C883	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
CN802	1-785-316-11	PIN, CONNECTOR (STRAIGHT) 4P			
		< DIODE >			
D851	8-719-200-82	DIODE 11ES2-TA1B			
D852	8-719-200-82	DIODE 11ES2-TA1B			
D853	8-719-200-82	DIODE 11ES2-TA1B			
		< EARTH >			
* EPT802	1-537-738-21	TERMINAL, EARTH			
		< FILTER >			
FL801	1-424-228-11	FILTER, NOISE			
FL802	1-424-228-11	FILTER, NOISE			
		< IC >			
IC850	8-759-634-50	IC M5218AL			
IC851	8-759-450-96	IC M65850P			

Ref. No.	Part No.	Description			Remarks
		< JACK >			
J801	1-770-226-11	JACK (LARGE TYPE)(MIC1)			
J802	1-770-226-11	JACK (LARGE TYPE)(MIC2)			
J803	1-770-226-11	JACK (LARGE TYPE)(PHONE)			
		< COIL >			
L851	1-410-521-11	INDUCTOR 100uH			
		< RESISTOR >			
R806	1-249-429-11	CARBON	10K	5%	1/4W
R807	1-249-429-11	CARBON	10K	5%	1/4W
R808	1-249-417-11	CARBON	1K	5%	1/4W F
R809	1-249-417-11	CARBON	1K	5%	1/4W F
R810	1-247-807-31	CARBON	100	5%	1/4W
R850	1-247-807-31	CARBON	100	5%	1/4W
R852	1-249-441-11	CARBON	100K	5%	1/4W
R853	1-249-417-11	CARBON	1K	5%	1/4W F
R854	1-249-437-11	CARBON	47K	5%	1/4W
R855	1-249-429-11	CARBON	10K	5%	1/4W
R856	1-247-889-00	CARBON	270K	5%	1/4W
R857	1-247-807-31	CARBON	100	5%	1/4W
R858	1-247-863-91	CARBON	22K	5%	1/4W
R859	1-247-863-91	CARBON	22K	5%	1/4W
R860	1-247-863-91	CARBON	22K	5%	1/4W
R861	1-247-881-00	CARBON	120K	5%	1/4W
R862	1-247-863-91	CARBON	22K	5%	1/4W
R863	1-247-863-91	CARBON	22K	5%	1/4W
R864	1-247-863-91	CARBON	22K	5%	1/4W
R865	1-249-437-11	CARBON	47K	5%	1/4W
R866	1-249-431-11	CARBON	15K	5%	1/4W
R867	1-249-431-11	CARBON	15K	5%	1/4W
		< VARIABLE RESISTOR >			
RV850	1-225-587-11	RES, VAR, CARBON 50K (MIC-VOL)			
RV851	1-225-587-11	RES, VAR, CARBON 50K (ECHO LEVEL)			
**********					
	A-2007-800-A	LEAF SW BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1001	1-107-716-11	ELECT	33uF	20%	10V
		< CONNECTOR >			
CN1001	1-568-860-11	SOCKET, CONNECTOR 17P			
		< DIODE >			
D1001	8-719-991-33	DIODE 1SS133T-77			
D1002	8-719-991-33	DIODE 1SS133T-77			
		< CABLE >			
* DM1001	1-784-581-11	HOLDER, CABLE (2.5MM PITCH) 4P			
		< IC >			
IC1001	8-749-014-38	PHOTO INTERRUPTER SG-264			
IC1002	8-749-014-38	PHOTO INTERRUPTER SG-264			

Ref. No.	Part No.	Description				Remarks
		< TRANSISTOR >				
Q1001	8-729-029-56	TRANSISTOR DTA144ESA-TP				
		< RESISTOR >				
R907	1-249-441-11	CARBON	100K	5%	1/4W	
R1001	1-247-815-91	CARBON	220	5%	1/4W	
R1002	1-247-815-91	CARBON	220	5%	1/4W	
R1003	1-249-414-11	CARBON	560	5%	1/4W	F
R1004	1-247-834-11	CARBON	1.3K	5%	1/4W	
R1005	1-247-818-91	CARBON	300	5%	1/4W	
R1006	1-247-864-11	CARBON	24K	5%	1/4W	
R1007	1-247-856-00	CARBON	11K	5%	1/4W	
R1008	1-249-417-11	CARBON	1K	5%	1/4W	F
		< VARIABLE RESISTOR >				
RV1001	1-241-785-11	RES, ADJ, CARBON 10K				
RV1002	1-241-785-11	RES, ADJ, CARBON 10K				
		< SWITCH >				
S1001	1-570-953-11	SWITCH, PUSH (1 KEY) (A PLAY)				
S1002	1-570-953-11	SWITCH, PUSH (1 KEY) (B PLAY)				
S1003	1-771-333-11	SWITCH, LEAF (A HALF)				
S1004	1-771-205-11	SWITCH, LEAF (A120/70)				
S1005	1-771-205-11	SWITCH, LEAF (REC A)				
S1006	1-771-333-11	SWITCH, LEAF (B HALF)				
S1008	1-771-205-11	SWITCH, LEAF (B120/70)				
S1009	1-771-205-11	SWITCH, LEAF (REC B)				
**********						
*	1-659-059-13	LED (CD) BOARD				
		**********				
		< DIODE >				
D201	8-719-032-98	DIODE SEL5820A (DISK NO.)				
		< TRANSISTOR >				
Q201	8-729-119-78	TRANSISTOR 2SC2785TP-HFE				
		< RESISTOR >				
R201	1-247-863-91	CARBON	22K	5%	1/4W	
R202	1-249-411-11	CARBON	330	5%	1/4W	
R203	1-249-437-11	CARBON	47K	5%	1/4W	
**********						
*	1-672-195-11	LED (PANEL) BOARD				
		**********				
		< DIODE >				
D671	8-719-058-03	DIODE SEL5423E-TP15 (DISC TABLE)				
D672	8-719-058-03	DIODE SEL5423E-TP15 (DISC TABLE)				
D673	8-719-058-03	DIODE SEL5423E-TP15 (DISC TABLE)				
D674	8-719-058-03	DIODE SEL5423E-TP15 (DISC TABLE)				
D675	8-719-058-03	DIODE SEL5423E-TP15 (DISC TABLE)				
		< RESISTOR >				
R600	1-249-410-11	CARBON	270	5%	1/4W	F
**********						

Ref. No.	Part No.	Description				Remarks
	A-4419-724-A	MAIN BOARD, COMPLETE (EA)				
		**********				
	A-4417-485-A	MAIN BOARD, COMPLETE (MY,SP,IA,TH)				
		**********				
	4-875-327-31	HEAT SINK				
	7-685-646-79	SCREW +BVTP	3 × 8		TYPE2 N-S	
		< CAPACITOR >				
C111	1-137-195-11	FILM	0.56uF	5%	50V	
C112	1-136-158-00	FILM	0.027uF	5%	50V	
C113	1-136-167-00	FILM	0.15uF	5%	50V	
C114	1-130-480-00	MYLAR	0.0056uF	5%	50V	
C115	1-136-159-00	FILM	0.033uF	5%	50V	
C116	1-130-473-00	MYLAR	0.0015uF	5%	50V	
C117	1-136-153-00	FILM	0.01uF	5%	50V	
C118	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	
C119	1-130-479-00	MYLAR	0.0047uF	5%	50V	
C120	1-130-477-00	MYLAR	0.0033uF	5%	50V	
C121	1-126-964-11	ELECT	10uF	20%	50V	
C122	1-163-006-11	CERAMIC CHIP	560PF	10%	50V	
C123	1-136-169-00	FILM	0.22uF	5%	50V	
C124	1-136-169-00	FILM	0.22uF	5%	50V	
C125	1-126-964-11	ELECT	10uF	20%	50V	
C131	1-104-664-11	ELECT	47uF	20%	16V	
C132	1-104-664-11	ELECT	47uF	20%	16V	
C135	1-126-964-11	ELECT	10uF	20%	50V	
C161	1-137-195-11	FILM	0.56uF	5%	50V	
C162	1-136-158-00	FILM	0.027uF	5%	50V	
C163	1-136-167-00	FILM	0.15uF	5%	50V	
C164	1-130-480-00	MYLAR	0.0056uF	5%	50V	
C165	1-136-159-00	FILM	0.033uF	5%	50V	
C166	1-130-473-00	MYLAR	0.0015uF	5%	50V	
C167	1-136-153-00	FILM	0.01uF	5%	50V	
C168	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	
C169	1-130-479-00	MYLAR	0.0047uF	5%	50V	
C170	1-130-477-00	MYLAR	0.0033uF	5%	50V	
C171	1-126-964-11	ELECT	10uF	20%	50V	
C172	1-163-006-11	CERAMIC CHIP	560PF	10%	50V	
C173	1-136-169-00	FILM	0.22uF	5%	50V	
C174	1-136-169-00	FILM	0.22uF	5%	50V	
C175	1-126-964-11	ELECT	10uF	20%	50V	
C176	1-136-495-11	FILM	0.068uF	5%	50V	
C177	1-136-153-00	FILM	0.01uF	5%	50V	
C181	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C182	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C183	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C191	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C192	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C193	1-126-964-11	ELECT	10uF	20%	50V	
C201	1-126-964-11	ELECT	10uF	20%	50V	
C202	1-126-964-11	ELECT	10uF	20%	50V	
C203	1-126-959-11	ELECT	0.47uF	20%	50V	
C204	1-126-959-11	ELECT	0.47uF	20%	50V	
C207	1-126-959-11	ELECT	0.47uF	20%	50V	
C208	1-126-959-11	ELECT	0.47uF	20%	50V	
C209	1-126-959-11	ELECT	0.47uF	20%	50V	
C210	1-126-959-11	ELECT	0.47uF	20%	50V	
C211	1-126-959-11	ELECT	0.47uF	20%	50V	

MAIN

Ref. No.	Part No.	Description			Remarks
C212	1-126-959-11	ELECT	0.47uF	20%	50V
C213	1-136-165-00	FILM	0.1uF	5%	50V
C214	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C215	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C216	1-126-960-11	ELECT	1uF	20%	50V
C217	1-130-479-00	MYLAR	0.0047uF	5%	50V
C218	1-130-471-00	MYLAR	0.001uF	5%	50V
C219	1-136-165-00	FILM	0.1uF	5%	50V
C220	1-136-169-00	FILM	0.22uF	5%	50V
C221	1-136-169-00	FILM	0.22uF	5%	50V
C222	1-136-165-00	FILM	0.1uF	5%	50V
C223	1-130-479-00	MYLAR	0.0047uF	5%	50V
C224	1-130-471-00	MYLAR	0.001uF	5%	50V
C225	1-126-960-11	ELECT	1uF	20%	50V
C226	1-130-480-00	MYLAR	0.0056uF	5%	50V
C227	1-136-161-00	FILM	0.047uF	5%	50V
C228	1-136-175-00	FILM	0.68uF	5%	50V
C229	1-136-169-00	FILM	0.22uF	5%	50V
C230	1-136-169-00	FILM	0.22uF	5%	50V
C231	1-126-963-11	ELECT	4.7uF	20%	50V
C232	1-126-963-11	ELECT	4.7uF	20%	50V
C233	1-136-169-00	FILM	0.22uF	5%	50V
C234	1-136-169-00	FILM	0.22uF	5%	50V
C235	1-136-165-00	FILM	0.1uF	5%	50V
C236	1-136-161-00	FILM	0.047uF	5%	50V
C237	1-136-161-00	FILM	0.047uF	5%	50V
C238	1-136-165-00	FILM	0.1uF	5%	50V
C239	1-136-165-00	FILM	0.1uF	5%	50V
C240	1-136-157-00	FILM	0.022uF	5%	50V
C241	1-136-157-00	FILM	0.022uF	5%	50V
C242	1-136-165-00	FILM	0.1uF	5%	50V
C243	1-130-469-00	MYLAR	680PF	5%	50V
C244	1-136-153-00	FILM	0.01uF	5%	50V
C245	1-136-153-00	FILM	0.01uF	5%	50V
C246	1-130-469-00	MYLAR	680PF	5%	50V
C247	1-136-153-00	FILM	0.01uF	5%	50V
C248	1-136-153-00	FILM	0.01uF	5%	50V
C249	1-104-664-11	ELECT	47uF	20%	16V
C250	1-130-481-00	MYLAR	0.0068uF	5%	50V
C251	1-126-963-11	ELECT	4.7uF	20%	50V
C252	1-126-934-11	ELECT	220uF	20%	16V
C253	1-126-934-11	ELECT	220uF	20%	16V
C255	1-126-964-11	ELECT	10uF	20%	50V
C256	1-126-964-11	ELECT	10uF	20%	50V
C257	1-126-964-11	ELECT	10uF	20%	50V
C258	1-126-964-11	ELECT	10uF	20%	50V
C259	1-126-964-11	ELECT	10uF	20%	50V
C260	1-126-964-11	ELECT	10uF	20%	50V
C261	1-126-964-11	ELECT	10uF	20%	50V
C262	1-126-964-11	ELECT	10uF	20%	50V
C264	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C301	1-126-960-11	ELECT	1uF	20%	50V
C302	1-130-479-00	MYLAR	0.0047uF	5%	50V
C303	1-136-165-00	FILM	0.1uF	5%	50V
C304	1-136-165-00	FILM	0.1uF	5%	50V
C305	1-126-964-11	ELECT	10uF	20%	50V
C306	1-126-960-11	ELECT	1uF	20%	50V
C307	1-126-959-11	ELECT	0.47uF	20%	50V
C308	1-126-964-11	ELECT	10uF	20%	50V
C309	1-137-194-81	FILM	0.47uF	5%	50V

Ref. No.	Part No.	Description			Remarks
C310	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C311	1-126-964-11	ELECT	10uF	20%	50V
C312	1-126-959-11	ELECT	0.47uF	20%	50V
C313	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C314	1-126-964-11	ELECT	10uF	20%	50V
C315	1-126-963-11	ELECT	4.7uF	20%	50V
C316	1-104-665-11	ELECT	100uF	20%	10V
C317	1-104-665-11	ELECT	100uF	20%	10V
C320	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C333	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C334	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C351	1-126-960-11	ELECT	1uF	20%	50V
C352	1-130-479-00	MYLAR	0.0047uF	5%	50V
C353	1-136-165-00	FILM	0.1uF	5%	50V
C354	1-136-165-00	FILM	0.1uF	5%	50V
C355	1-126-964-11	ELECT	10uF	20%	50V
C356	1-126-960-11	ELECT	1uF	20%	50V
C357	1-126-959-11	ELECT	0.47uF	20%	50V
C358	1-126-964-11	ELECT	10uF	20%	50V
C359	1-137-194-81	FILM	0.47uF	5%	50V
C401	1-126-961-11	ELECT	2.2uF	20%	50V
C411	1-163-033-91	CERAMIC CHIP	0.022uF		50V
C412	1-163-033-91	CERAMIC CHIP	0.022uF		50V
C413	1-126-916-11	ELECT	1000uF	20%	6.3V
C414	1-126-916-11	ELECT	1000uF	20%	6.3V
C415	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C416	1-126-925-11	ELECT	470uF	20%	10V
C431	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C451	1-126-961-11	ELECT	2.2uF	20%	50V
C510	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C511	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C516	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C562	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C564	1-104-665-11	ELECT	100uF	20%	10V
C598	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C599	1-104-665-11	ELECT	100uF	20%	10V
C601	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C602	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C603	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C604	1-126-961-11	ELECT	2.2uF	20%	50V
C605	1-130-479-00	MYLAR	0.0047uF	5%	50V
C606	1-130-473-00	MYLAR	0.0015uF	5%	50V
C607	1-136-159-00	FILM	0.033uF	5%	50V
C608	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C609	1-126-933-11	ELECT	100uF	20%	16V
C651	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C652	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C653	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C654	1-126-961-11	ELECT	2.2uF	20%	50V
C655	1-130-479-00	MYLAR	0.0047uF	5%	50V
C656	1-130-473-00	MYLAR	0.0015uF	5%	50V
C657	1-136-159-00	FILM	0.033uF	5%	50V
C658	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C659	1-126-933-11	ELECT	100uF	20%	16V
C701	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C702	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C703	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C711	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C712	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C713	1-163-001-11	CERAMIC CHIP	220PF	10%	50V

Ref. No.	Part No.	Description			Remarks
C721	1-126-960-11	ELECT	1uF	20%	50V
C722	1-126-926-11	ELECT	1000uF	20%	10V
C723	1-126-960-11	ELECT	1uF	20%	50V
C724	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C725	1-126-960-11	ELECT	1uF	20%	50V
C731	1-126-964-11	ELECT	10uF	20%	50V
C732	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C733	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C751	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C752	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C753	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C761	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C762	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C763	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C772	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C774	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C775	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C776	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C777	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C778	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C782	1-104-665-11	ELECT	100uF	20%	10V
C803	1-126-964-11	ELECT	10uF	20%	50V
C804	1-136-165-00	FILM	0.1uF	5%	50V
C805	1-136-165-00	FILM	0.1uF	5%	50V
C806	1-126-916-11	ELECT	1000uF	20%	6.3V
C808	1-109-953-11	ELECT	2.2uF	20%	50V
C902	1-126-939-11	ELECT	10000uF	20%	16V
C903	1-126-964-11	ELECT	10uF	20%	50V
C904	1-126-964-11	ELECT	10uF	20%	50V
C905	1-126-924-11	ELECT	330uF	20%	10V
C911	1-126-964-11	ELECT	10uF	20%	50V
C912	1-126-916-11	ELECT	1000uF	20%	6.3V
C913	1-104-665-11	ELECT	100uF	20%	10V
C914	1-104-656-11	ELECT	2200uF	20%	6.3V
C921	1-126-964-11	ELECT	10uF	20%	50V
C922	1-126-964-11	ELECT	10uF	20%	50V
C932	1-126-964-11	ELECT	10uF	20%	50V
C933	1-126-933-11	ELECT	100uF	20%	16V
C934	1-126-964-11	ELECT	10uF	20%	50V
C935	1-126-767-11	ELECT	1000uF	20%	16V
C936	1-126-964-11	ELECT	10uF	20%	50V
C937	1-104-665-11	ELECT	100uF	20%	10V
C938	1-126-933-11	ELECT	100uF	20%	16V
C952	1-126-943-11	ELECT	2200uF	20%	25V
C953	1-126-964-11	ELECT	10uF	20%	50V
C954	1-126-964-11	ELECT	10uF	20%	50V
C955	1-126-924-11	ELECT	330uF	20%	10V
C961	1-163-038-91	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
CN303	1-784-776-11	CONNECTOR, FFC 15P			
CN304	1-784-778-11	CONNECTOR, FFC 17P			
CN411	1-750-745-11	CONNECTOR, FFC/FPC 13P			
CN412	1-785-321-11	PIN, CONNECTOR (STRAIGHT) 9P			
CN431	1-784-776-11	CONNECTOR, FFC 15P			
CN441	1-750-745-11	CONNECTOR, FFC/FPC 13P			
CN452	1-785-316-11	PIN, CONNECTOR (STRAIGHT) 4P			
* CN701	1-564-505-11	PLUG, CONNECTOR 2P			
CN702	1-691-767-11	PLUG (MICRO CONNECTOR) 5P			
CN901	1-778-982-11	CONNECTOR, BOARD TO BOARD 13P			

Ref. No.	Part No.	Description	Remarks
* CN902	1-770-729-11	CONNECTOR, BOARD TO BOARD 10P	
* CN903	1-564-506-11	PLUG, CONNECTOR 3P	
		< DIODE >	
D191	8-719-988-61	DIODE 1SS355TE-17	
D192	8-719-988-61	DIODE 1SS355TE-17	
D193	8-719-988-61	DIODE 1SS355TE-17	
D194	8-719-988-61	DIODE 1SS355TE-17	
D201	8-719-988-61	DIODE 1SS355TE-17	
D333	8-719-988-61	DIODE 1SS355TE-17	
D334	8-719-988-61	DIODE 1SS355TE-17	
D335	8-719-988-61	DIODE 1SS355TE-17	
D336	8-719-988-61	DIODE 1SS355TE-17	
D401	8-719-988-61	DIODE 1SS355TE-17	
D501	8-719-988-61	DIODE 1SS355TE-17	
D534	8-719-988-61	DIODE 1SS355TE-17	
D801	8-719-988-61	DIODE 1SS355TE-17	
D802	8-719-988-61	DIODE 1SS355TE-17	
D803	8-719-988-61	DIODE 1SS355TE-17	
D804	8-719-988-61	DIODE 1SS355TE-17	
D805	8-719-988-61	DIODE 1SS355TE-17	
D806	8-719-988-61	DIODE 1SS355TE-17	
D807	8-719-988-61	DIODE 1SS355TE-17	
D808	8-719-210-33	DIODE EC10DS2-TE12L5	
D911	8-719-988-61	DIODE 1SS355TE-17	
D912	8-719-210-33	DIODE EC10DS2-TE12L5	
D931	8-719-210-33	DIODE EC10DS2-TE12L5	
D951	8-719-988-61	DIODE 1SS355TE-17	
		< FERRITE BEAD >	
FB411	1-414-772-11	FERRITE 0UH	
FB412	1-414-772-11	FERRITE 0UH	
FB413	1-414-551-11	FERRITE 0UH	
FB415	1-414-772-11	FERRITE 0UH	
		< FILTER >	
FL201	1-233-289-21	FILTER, EMI (SMD)	
FL501	1-233-289-21	FILTER, EMI (SMD)	
FL502	1-233-289-21	FILTER, EMI (SMD)	
FL503	1-233-289-21	FILTER, EMI (SMD)	
		< IC >	
IC101	8-759-571-54	IC M62493FP	
IC181	8-759-009-06	IC MC14052BFEL	
IC191	8-759-571-53	IC BA7615N	
IC201	8-759-571-51	IC M62464FP	
IC301	8-759-495-26	IC HA12215F	
IC501	8-759-597-15	IC M30622MA-A09FP	
IC601	8-759-636-55	IC M5218AFP-T1	
IC781	8-749-923-04	IC TOTX178A	
IC801	8-759-635-63	IC M51943BSL-TP	
IC901	8-759-604-86	IC M5F7807L	
IC911	8-759-231-53	IC M5F7805L	
IC921	8-759-231-53	IC M5F7805L	
IC931	8-759-604-38	IC M5F78M10L	
IC932	8-759-701-79	IC NJM7812FA	
IC933	8-759-604-86	IC M5F7807L	
IC951	8-759-604-90	IC M5F7907L	

MAIN

Ref. No.	Part No.	Description	Remarks
		< JACK >	
J701	1-766-558-41	JACK, PIN 8P (PHONO/MD/VIDEO 1)	
J702	1-770-337-11	JACK, PIN 3P (VIDEO IN/OUT)	
J703	1-779-599-11	JACK, PIN 6P (DVD INPUT)	
J704	1-770-377-31	JACK, PIN 1P (WOOFER OUT)	
		< JUMPER RESISTOR >	
JR1	1-216-295-91	SHORT 0	
JR2	1-216-296-91	SHORT 0	
JR3	1-216-296-91	SHORT 0	
JR4	1-216-295-91	SHORT 0	
JR5	1-216-295-91	SHORT 0	
JR6	1-216-296-91	SHORT 0	
JR7	1-216-296-91	SHORT 0	
JR8	1-216-296-91	SHORT 0	
JR9	1-216-295-91	SHORT 0	
JR10	1-216-296-91	SHORT 0	
JR11	1-216-296-91	SHORT 0	
JR519	1-216-295-91	SHORT 0	
JR532	1-216-295-91	SHORT 0	
JR533	1-216-295-91	SHORT 0	
JR556	1-216-295-91	SHORT 0	
JR594	1-216-295-91	SHORT 0	
JR703	1-216-295-91	SHORT 0	
JR907	1-216-295-91	SHORT 0	
JR911	1-216-295-91	SHORT 0	
JR921	1-216-296-91	SHORT 0	
		< COIL >	
L201	1-412-032-11	INDUCTOR CHIP 100uH	
L781	1-412-032-11	INDUCTOR CHIP 100uH	
		< TRANSISTOR >	
Q111	8-729-620-05	TRANSISTOR 2SC2603TP-EF	
Q112	8-729-620-05	TRANSISTOR 2SC2603TP-EF	
Q113	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q115	8-729-029-86	TRANSISTOR DTC124ESA-TP	
Q161	8-729-620-05	TRANSISTOR 2SC2603TP-EF	
Q162	8-729-620-05	TRANSISTOR 2SC2603TP-EF	
Q163	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q165	8-729-029-86	TRANSISTOR DTC124ESA-TP	
Q271	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q281	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q291	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q331	8-729-118-00	TRANSISTOR 2SB1116-TP-LK	
Q332	8-729-029-66	TRANSISTOR DTC114ESA-TP	
Q333	8-729-118-00	TRANSISTOR 2SB1116-TP-LK	
Q334	8-729-029-66	TRANSISTOR DTC114ESA-TP	
Q335	8-729-029-66	TRANSISTOR DTC114ESA-TP	
Q336	8-729-116-59	TRANSISTOR 2SB1068TP	
Q337	8-729-045-21	TRANSISTOR 2SD1513TP-LK	
Q338	8-729-029-21	TRANSISTOR DTA114ESA-TP	
Q339	8-729-029-66	TRANSISTOR DTC114ESA-TP	
Q340	8-729-116-59	TRANSISTOR 2SB1068TP	
Q341	8-729-045-21	TRANSISTOR 2SD1513TP-LK	
Q342	8-729-029-21	TRANSISTOR DTA114ESA-TP	
Q343	8-729-029-66	TRANSISTOR DTC114ESA-TP	
Q731	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	

Ref. No.	Part No.	Description	Remarks
Q801	8-729-620-05	TRANSISTOR 2SC2603TP-EF	
Q802	8-729-029-21	TRANSISTOR DTA114ESA-TP	
Q803	8-729-029-21	TRANSISTOR DTA114ESA-TP	
Q804	8-729-029-40	TRANSISTOR DTA124ESA-TP	
Q901	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q902	8-729-029-40	TRANSISTOR DTA124ESA-TP	
Q903	8-729-040-19	TRANSISTOR RT1N137L-TP	
Q904	8-729-029-86	TRANSISTOR DTC124ESA-TP	
Q905	8-729-119-76	TRANSISTOR 2SA1115TP-EF	
Q906	8-729-029-68	TRANSISTOR DTC114TSA-TP	
Q911	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q912	8-729-029-86	TRANSISTOR DTC124ESA-TP	
Q914	8-729-029-86	TRANSISTOR DTC124ESA-TP	
Q921	8-729-018-59	TRANSISTOR 2SB1375(LB-SONY)	
Q931	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q932	8-729-029-86	TRANSISTOR DTC124ESA-TP	
Q961	8-729-620-05	TRANSISTOR 2SC2603TP-EF	
Q962	8-729-118-00	TRANSISTOR 2SB1116-TP-LK	
		< RESISTOR >	
R111	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R112	1-216-121-91	RES,CHIP 1M 5% 1/10W	
R113	1-216-101-00	METAL CHIP 150K 5% 1/10W	
R114	1-216-043-91	RES,CHIP 560 5% 1/10W	
R115	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R116	1-216-091-00	METAL CHIP 56K 5% 1/10W	
R117	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R118	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R119	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R120	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R121	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R122	1-216-295-91	SHORT 0	
R123	1-216-101-00	METAL CHIP 150K 5% 1/10W	
R124	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R125	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R126	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R127	1-216-101-00	METAL CHIP 150K 5% 1/10W	
R129	1-216-121-91	RES,CHIP 1M 5% 1/10W	
R131	1-216-025-91	RES,CHIP 100 5% 1/10W	
R132	1-216-025-91	RES,CHIP 100 5% 1/10W	
R133	1-216-025-91	RES,CHIP 100 5% 1/10W	
R161	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R162	1-216-121-91	RES,CHIP 1M 5% 1/10W	
R163	1-216-101-00	METAL CHIP 150K 5% 1/10W	
R164	1-216-043-91	RES,CHIP 560 5% 1/10W	
R165	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R166	1-216-091-00	METAL CHIP 56K 5% 1/10W	
R167	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R168	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R169	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R170	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R171	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R172	1-216-295-91	SHORT 0	
R173	1-216-101-00	METAL CHIP 150K 5% 1/10W	
R174	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R175	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R177	1-216-101-00	METAL CHIP 150K 5% 1/10W	
R178	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R179	1-216-121-91	RES,CHIP 1M 5% 1/10W	
R201	1-216-025-91	RES,CHIP 100 5% 1/10W	

Ref. No.	Part No.	Description			Remarks
R202	1-216-025-91	RES,CHIP	100	5%	1/10W
R203	1-216-041-00	METAL CHIP	470	5%	1/10W
R204	1-216-109-00	METAL CHIP	330K	5%	1/10W
R205	1-216-089-91	RES,CHIP	47K	5%	1/10W
R206	1-216-101-00	METAL CHIP	150K	5%	1/10W
R207	1-216-094-00	RES,CHIP	75K	5%	1/10W
R208	1-216-089-91	RES,CHIP	47K	5%	1/10W
R209	1-216-101-00	METAL CHIP	150K	5%	1/10W
R210	1-216-094-00	RES,CHIP	75K	5%	1/10W
R211	1-216-097-91	RES,CHIP	100K	5%	1/10W
R212	1-216-097-91	RES,CHIP	100K	5%	1/10W
R213	1-216-097-91	RES,CHIP	100K	5%	1/10W
R214	1-216-097-91	RES,CHIP	100K	5%	1/10W
R215	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R271	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R272	1-216-097-91	RES,CHIP	100K	5%	1/10W
R273	1-216-073-00	METAL CHIP	10K	5%	1/10W
R281	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R282	1-216-097-91	RES,CHIP	100K	5%	1/10W
R283	1-216-073-00	METAL CHIP	10K	5%	1/10W
R291	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R292	1-216-097-91	RES,CHIP	100K	5%	1/10W
R293	1-216-073-00	METAL CHIP	10K	5%	1/10W
R301	1-216-085-00	METAL CHIP	33K	5%	1/10W
R302	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R303	1-216-025-91	RES,CHIP	100	5%	1/10W
R304	1-216-025-91	RES,CHIP	100	5%	1/10W
R305	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R306	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R307	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R308	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R309	1-216-081-00	METAL CHIP	22K	5%	1/10W
R311	1-216-121-91	RES,CHIP	1M	5%	1/10W
R312	1-216-102-00	RES,CHIP	160K	5%	1/10W
R313	1-216-097-91	RES,CHIP	100K	5%	1/10W
R315	1-216-073-00	METAL CHIP	10K	5%	1/10W
R316	1-216-079-00	METAL CHIP	18K	5%	1/10W
R317	1-216-073-00	METAL CHIP	10K	5%	1/10W
R318	1-216-073-00	METAL CHIP	10K	5%	1/10W
R319	1-216-111-00	METAL CHIP	390K	5%	1/10W
R321	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R322	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R332	1-216-045-00	METAL CHIP	680	5%	1/10W
R333	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R334	1-216-045-00	METAL CHIP	680	5%	1/10W
R335	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R336	1-216-089-91	RES,CHIP	47K	5%	1/10W
R337	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R338	1-216-045-00	METAL CHIP	680	5%	1/10W
R339	1-216-089-91	RES,CHIP	47K	5%	1/10W
R340	1-216-089-91	RES,CHIP	47K	5%	1/10W
R341	1-216-045-00	METAL CHIP	680	5%	1/10W
R342	1-216-089-91	RES,CHIP	47K	5%	1/10W
R343	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R344	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R345	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R346	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R347	1-216-045-00	METAL CHIP	680	5%	1/10W
R348	1-216-045-00	METAL CHIP	680	5%	1/10W
R351	1-216-085-00	METAL CHIP	33K	5%	1/10W
R352	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R353	1-216-025-91	RES,CHIP	100	5%	1/10W
R354	1-216-025-91	RES,CHIP	100	5%	1/10W
R355	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R356	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R357	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R358	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R359	1-216-085-00	METAL CHIP	33K	5%	1/10W
R371	1-216-089-91	RES,CHIP	47K	5%	1/10W
R372	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R373	1-216-049-91	RES,CHIP	1K	5%	1/10W
R374	1-216-089-91	RES,CHIP	47K	5%	1/10W
R375	1-216-094-00	RES,CHIP	75K	5%	1/10W
R376	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R377	1-216-089-91	RES,CHIP	47K	5%	1/10W
R378	1-216-094-00	RES,CHIP	75K	5%	1/10W
R401	1-216-025-91	RES,CHIP	100	5%	1/10W
R402	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R411	1-216-085-00	METAL CHIP	33K	5%	1/10W
R413	1-216-295-91	SHORT 0			
R414	1-216-295-91	SHORT 0			
R451	1-216-025-91	RES,CHIP	100	5%	1/10W
R452	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R501	1-216-025-91	RES,CHIP	100	5%	1/10W
R503	1-216-025-91	RES,CHIP	100	5%	1/10W
R504	1-216-025-91	RES,CHIP	100	5%	1/10W
R505	1-216-025-91	RES,CHIP	100	5%	1/10W
R511	1-216-109-00	METAL CHIP	330K	5%	1/10W
R513	1-216-295-91	SHORT 0			
R517	1-216-073-00	METAL CHIP	10K	5%	1/10W
R518	1-216-025-91	RES,CHIP	100	5%	1/10W
R522	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R523	1-216-025-91	RES,CHIP	100	5%	1/10W
R524	1-216-025-91	RES,CHIP	100	5%	1/10W
R525	1-216-025-91	RES,CHIP	100	5%	1/10W
R526	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R527	1-216-025-91	RES,CHIP	100	5%	1/10W
R528	1-216-025-91	RES,CHIP	100	5%	1/10W
R529	1-216-025-91	RES,CHIP	100	5%	1/10W
R530	1-216-025-91	RES,CHIP	100	5%	1/10W
R532	1-216-025-91	RES,CHIP	100	5%	1/10W
R533	1-216-025-91	RES,CHIP	100	5%	1/10W
R536	1-216-025-91	RES,CHIP	100	5%	1/10W
R538	1-216-025-91	RES,CHIP	100	5%	1/10W
R540	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R541	1-216-073-00	METAL CHIP	10K	5%	1/10W
R542	1-216-025-91	RES,CHIP	100	5%	1/10W
R543	1-216-025-91	RES,CHIP	100	5%	1/10W
R545	1-216-025-91	RES,CHIP	100	5%	1/10W
R546	1-216-025-91	RES,CHIP	100	5%	1/10W
R547	1-216-025-91	RES,CHIP	100	5%	1/10W
R548	1-216-025-91	RES,CHIP	100	5%	1/10W
R549	1-216-041-00	METAL CHIP	470	5%	1/10W
R550	1-216-025-91	RES,CHIP	100	5%	1/10W
R551	1-216-025-91	RES,CHIP	100	5%	1/10W
R552	1-216-025-91	RES,CHIP	100	5%	1/10W
R553	1-216-025-91	RES,CHIP	100	5%	1/10W
R554	1-216-025-91	RES,CHIP	100	5%	1/10W
R555	1-216-025-91	RES,CHIP	100	5%	1/10W
R556	1-216-025-91	RES,CHIP	100	5%	1/10W

MAIN

Ref. No.	Part No.	Description			Remarks
R559	1-216-0225-91	RES,CHIP	100	5%	1/10W
R561	1-216-025-91	RES,CHIP	100	5%	1/10W
R563	1-216-025-91	RES,CHIP	100	5%	1/10W
R565	1-216-025-91	RES,CHIP	100	5%	1/10W
R567	1-216-073-00	METAL CHIP	10K	5%	1/10W
R568	1-216-025-91	RES,CHIP	100	5%	1/10W
R569	1-216-025-91	RES,CHIP	100	5%	1/10W
R570	1-216-089-91	RES,CHIP	47K	5%	1/10W
R572	1-216-025-91	RES,CHIP	100	5%	1/10W
R573	1-216-025-91	RES,CHIP	100	5%	1/10W
R574	1-216-025-91	RES,CHIP	100	5%	1/10W
R575	1-216-025-91	RES,CHIP	100	5%	1/10W
R576	1-216-025-91	RES,CHIP	100	5%	1/10W
R577	1-216-025-91	RES,CHIP	100	5%	1/10W
R578	1-216-025-91	RES,CHIP	100	5%	1/10W
R579	1-216-025-91	RES,CHIP	100	5%	1/10W
R580	1-216-025-91	RES,CHIP	100	5%	1/10W
R581	1-216-025-91	RES,CHIP	100	5%	1/10W
R582	1-216-025-91	RES,CHIP	100	5%	1/10W
R583	1-216-025-91	RES,CHIP	100	5%	1/10W
R584	1-216-025-91	RES,CHIP	100	5%	1/10W
R585	1-216-025-91	RES,CHIP	100	5%	1/10W
R586	1-216-025-91	RES,CHIP	100	5%	1/10W
R587	1-216-025-91	RES,CHIP	100	5%	1/10W
R588	1-216-025-91	RES,CHIP	100	5%	1/10W
R589	1-216-025-91	RES,CHIP	100	5%	1/10W
R590	1-216-025-91	RES,CHIP	100	5%	1/10W
R591	1-216-025-91	RES,CHIP	100	5%	1/10W
R593	1-216-025-91	RES,CHIP	100	5%	1/10W
R594	1-216-073-00	METAL CHIP	10K	5%	1/10W
R595	1-216-089-91	RES,CHIP	47K	5%	1/10W
R596	1-216-089-91	RES,CHIP	47K	5%	1/10W
R597	1-216-089-91	RES,CHIP	47K	5%	1/10W (EA)
R597	1-216-069-00	METAL CHIP	6.8K	5%	1/10W (MY,SP,TH,IA)
R600	1-216-025-91	RES,CHIP	100	5%	1/10W
R601	1-216-049-91	RES,CHIP	1K	5%	1/10W
R602	1-216-049-91	RES,CHIP	1K	5%	1/10W
R603	1-216-089-91	RES,CHIP	47K	5%	1/10W
R604	1-216-049-91	RES,CHIP	1K	5%	1/10W
R605	1-216-115-00	METAL CHIP	560K	5%	1/10W
R606	1-216-089-91	RES,CHIP	47K	5%	1/10W
R607	1-216-049-91	RES,CHIP	1K	5%	1/10W
R608	1-216-097-91	RES,CHIP	100K	5%	1/10W
R609	1-216-033-00	METAL CHIP	220	5%	1/10W
R651	1-216-049-91	RES,CHIP	1K	5%	1/10W
R652	1-216-049-91	RES,CHIP	1K	5%	1/10W
R653	1-216-089-91	RES,CHIP	47K	5%	1/10W
R654	1-216-049-91	RES,CHIP	1K	5%	1/10W
R655	1-216-115-00	METAL CHIP	560K	5%	1/10W
R656	1-216-089-91	RES,CHIP	47K	5%	1/10W
R657	1-216-049-91	RES,CHIP	1K	5%	1/10W
R658	1-216-097-91	RES,CHIP	100K	5%	1/10W
R659	1-216-033-00	METAL CHIP	220	5%	1/10W
R701	1-216-049-91	RES,CHIP	1K	5%	1/10W
R702	1-216-097-91	RES,CHIP	100K	5%	1/10W
R703	1-216-049-91	RES,CHIP	1K	5%	1/10W
R704	1-216-097-91	RES,CHIP	100K	5%	1/10W
R705	1-216-049-91	RES,CHIP	1K	5%	1/10W
R706	1-216-097-91	RES,CHIP	100K	5%	1/10W
R711	1-216-071-00	METAL CHIP	8.2K	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R712	1-216-073-00	METAL CHIP	10K	5%	1/10W
R713	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R714	1-216-073-00	METAL CHIP	10K	5%	1/10W
R715	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R716	1-216-073-00	METAL CHIP	10K	5%	1/10W
R721	1-216-022-00	METAL CHIP	75	5%	1/10W
R722	1-216-015-00	METAL CHIP	39	5%	1/10W
R723	1-216-022-00	METAL CHIP	75	5%	1/10W
R724	1-216-073-00	METAL CHIP	10K	5%	1/10W
R725	1-216-022-00	METAL CHIP	75	5%	1/10W
R731	1-216-073-00	METAL CHIP	10K	5%	1/10W
R732	1-216-049-91	RES,CHIP	1K	5%	1/10W
R733	1-216-097-91	RES,CHIP	100K	5%	1/10W
R734	1-216-049-91	RES,CHIP	1K	5%	1/10W
R751	1-216-049-91	RES,CHIP	1K	5%	1/10W
R752	1-216-097-91	RES,CHIP	100K	5%	1/10W
R753	1-216-049-91	RES,CHIP	1K	5%	1/10W
R754	1-216-097-91	RES,CHIP	100K	5%	1/10W
R755	1-216-049-91	RES,CHIP	1K	5%	1/10W
R756	1-216-097-91	RES,CHIP	100K	5%	1/10W
R761	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R762	1-216-073-00	METAL CHIP	10K	5%	1/10W
R763	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R764	1-216-073-00	METAL CHIP	10K	5%	1/10W
R765	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R766	1-216-073-00	METAL CHIP	10K	5%	1/10W
R801	1-216-049-91	RES,CHIP	1K	5%	1/10W
R802	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R803	1-216-025-91	RES,CHIP	100	5%	1/10W
R804	1-216-089-91	RES,CHIP	47K	5%	1/10W
R805	1-216-089-91	RES,CHIP	47K	5%	1/10W
R806	1-216-073-00	METAL CHIP	10K	5%	1/10W
R807	1-216-073-00	METAL CHIP	10K	5%	1/10W
R808	1-216-049-91	RES,CHIP	1K	5%	1/10W
R809	1-216-097-91	RES,CHIP	100K	5%	1/10W
R810	1-216-033-00	METAL CHIP	220	5%	1/10W
R811	1-216-097-91	RES,CHIP	100K	5%	1/10W
R901	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R902	1-216-081-00	METAL CHIP	22K	5%	1/10W
R903	1-216-049-91	RES,CHIP	1K	5%	1/10W
R916	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R917	1-216-037-00	METAL CHIP	330	5%	1/10W
R919	1-216-037-00	METAL CHIP	330	5%	1/10W
R920	1-216-037-00	METAL CHIP	330	5%	1/10W
R961	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R962	1-216-079-00	METAL CHIP	18K	5%	1/10W
R963	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
		< VARIABLE RESISTOR >			
RV301	1-238-600-11	RES, ADJ, CARBON 10K			
RV351	1-238-600-11	RES, ADJ, CARBON 10K			
		< VIBRATOR >			
X501	1-567-098-41	VIBRATOR, CRYSTAL 32.768kHz			
X502	1-781-107-21	VIBRATOR, SERAMIC 16MHz			

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Ref. No.	Part No.	Description			Remarks
	A-4417-494-A	PA BOARD, COMPLETE (EA,MY,SP,IA) **********			
	A-4424-301-A	PA BOARD, COMPLETE (TH) **********			
	7-685-646-79	SCREW +BVTP 3 × 8 TYPE2 N-S			
		< CAPACITOR >			
C401	1-126-963-11	ELECT	4.7uF	20%	50V
C412	1-161-494-00	CERAMIC	0.022uF		25V
C413	1-161-494-00	CERAMIC	0.022uF		25V
C414	1-161-494-00	CERAMIC	0.022uF		25V
C415	1-161-494-00	CERAMIC	0.022uF		25V
C416	1-161-494-00	CERAMIC	0.022uF		25V
C432	1-104-665-11	ELECT	100uF	20%	10V
C433	1-126-962-11	ELECT	3.3uF	20%	50V
C801	1-128-582-11	ELECT	10uF	20%	100V
C802	1-162-292-31	CERAMIC	680PF	10%	50V
C803	1-162-286-21	CERAMIC	220PF	10%	50V
C804	1-126-967-11	ELECT	47uF	20%	50V
C807	1-128-560-11	ELECT	22uF	20%	100V
C808	1-130-777-00	FILM	0.1uF	10%	100V
C809	1-130-777-00	FILM	0.1uF	10%	100V
C810	1-128-562-11	ELECT	47uF	20%	100V (TH)
C811	1-130-493-00	MYLAR	0.068uF	5%	50V
C812	1-130-493-00	MYLAR	0.068uF	5%	50V
C813	1-161-494-00	CERAMIC	0.022uF		25V
C814	1-162-294-31	CERAMIC	0.001uF	10%	50V
C815	1-128-562-11	ELECT	47uF	20%	100V
C830	1-107-714-11	ELECT	10uF	20%	50V
C831	1-126-964-11	ELECT	10uF	20%	50V
C832	1-126-967-11	ELECT	47uF	20%	50V
C841	1-127-811-11	ELECT	3300uF	20%	50V
C842	1-127-814-11	ELECT	3300uF	20%	80V
C844	1-130-777-00	FILM	0.1uF	10%	100V
C845	1-126-943-11	ELECT	2200uF	20%	25V
C847	1-164-159-21	CERAMIC	0.1uF		50V
C848	1-164-159-21	CERAMIC	0.1uF		50V
C849	1-164-159-21	CERAMIC	0.1uF		50V
C850	1-107-721-11	ELECT	4.7uF	20%	100V
C851	1-128-582-11	ELECT	10uF	20%	100V
C852	1-162-292-31	CERAMIC	680PF	10%	50V
C853	1-162-286-21	CERAMIC	220PF	10%	50V
C854	1-126-967-11	ELECT	47uF	20%	50V
C857	1-128-560-11	ELECT	22uF	20%	100V
C858	1-164-159-21	CERAMIC	0.1uF		50V
C859	1-164-159-21	CERAMIC	0.1uF		50V
C861	1-130-493-00	MYLAR	0.068uF	5%	50V
C862	1-130-493-00	MYLAR	0.068uF	5%	50V
C891	1-127-811-11	ELECT	3300uF	20%	50V
C892	1-127-814-11	ELECT	3300uF	20%	80V
C894	1-130-777-00	FILM	0.1uF	10%	100V
C895	1-107-721-11	ELECT	4.7uF	20%	100V
C904	1-126-964-11	ELECT	10uF	20%	50V
C905	1-126-948-11	ELECT	100uF	20%	35V
C909	1-164-159-21	CERAMIC	0.1uF		50V

Ref. No.	Part No.	Description	Remarks
		< CONNECTOR >	
CN803	1-778-981-11	CONNECTOR, BOARD TO BOARD 13P	
CN804	1-766-921-11	CONNECTOR, BOARD TO BOARD 10P	
		< DIODE >	
D401	8-719-991-33	DIODE 1SS133T-77	
D402	8-719-991-33	DIODE 1SS133T-77	
D403	8-719-991-33	DIODE 1SS133T-77	
D404	8-719-991-33	DIODE 1SS133T-77	
D405	8-719-991-33	DIODE 1SS133T-77	
D406	8-719-991-33	DIODE 1SS133T-77	
D407	8-719-991-33	DIODE 1SS133T-77	
D408	8-719-991-33	DIODE 1SS133T-77	
D409	8-719-991-33	DIODE 1SS133T-77	
D410	8-719-991-33	DIODE 1SS133T-77	
D801	8-719-991-33	DIODE 1SS133T-77	
D802	8-719-110-06	DIODE MTZJ-T-77-8.2A	
D803	8-719-991-33	DIODE 1SS133T-77	
D804	8-719-991-33	DIODE 1SS133T-77	
D805	8-719-991-33	DIODE 1SS133T-77	
D831	8-719-510-68	DIODE D5SBA204101	
D833	8-719-200-82	DIODE 11ES2-NTA1B	
D834	8-719-200-82	DIODE 11ES2-NTA1B	
D835	8-719-200-82	DIODE 11ES2-NTA1B	
D836	8-719-200-82	DIODE 11ES2-NTA1B	
D841	8-719-975-85	DIODE 21DQ04N-TA2	
D842	8-719-975-85	DIODE 21DQ04N-TA2	
D843	8-719-975-85	DIODE 21DQ04N-TA2	
D844	8-719-975-85	DIODE 21DQ04N-TA2	
D851	8-719-991-33	DIODE 1SS133T-77	
D852	8-719-110-06	DIODE MTZJ-T-77-8.2A	
D911	8-719-934-25	DIODE HZS33-1LTD	
D912	8-719-109-89	DIODE MTZJ-T-77-5.6	
		< IC >	
IC801	8-749-016-11	IC STK411-230M	
		< TRANSISTOR >	
Q401	8-729-029-21	TRANSISTOR DTA114ESA-TP	
Q402	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q403	8-729-029-21	TRANSISTOR DTA114ESA-TP	
Q404	8-729-029-21	TRANSISTOR DTA114ESA-TP	
Q406	8-729-029-86	TRANSISTOR DTC124ESA-TP	
Q407	8-729-029-86	TRANSISTOR DTC124ESA-TP	
Q431	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q432	8-729-119-76	TRANSISTOR 2SA1115TP-EF	
Q433	8-729-620-05	TRANSISTOR 2SC2603TP-EF	
Q434	8-729-620-05	TRANSISTOR 2SC2603TP-EF	
Q437	8-729-620-05	TRANSISTOR 2SC2603TP-EF	
Q439	8-729-620-05	TRANSISTOR 2SC2603TP-EF	
Q801	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q803	8-729-140-82	TRANSISTOR 2SA988TP-PAFAEA	
Q804	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q805	8-729-231-55	TRANSISTOR 2SC2878AB-TPE2	
Q831	8-729-029-86	TRANSISTOR DTC124ESA-TP	
Q832	8-729-620-05	TRANSISTOR 2SC2603TP-EF	
Q833	8-729-029-40	TRANSISTOR DTA124ESA-TP	
Q834	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	

PA PANEL-VR

Ref. No.	Part No.	Description				Remarks
Q851	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA			
Q855	8-729-231-55	TRANSISTOR	2SC2878AB-TPE2			
Q903	8-729-048-52	TRANSISTOR	2SA1932(TP)			
Q904	8-729-119-76	TRANSISTOR	2SA1115TP-EF			
		< RESISTOR >				
⚠R401	1-215-889-00	METAL OXIDE	330	5%	2W	F
⚠R402	1-215-889-00	METAL OXIDE	330	5%	2W	F
⚠R403	1-215-889-00	METAL OXIDE	330	5%	2W	F
R406	1-249-437-11	CARBON	47K	5%	1/4W	
R407	1-249-437-11	CARBON	47K	5%	1/4W	
R408	1-249-440-11	CARBON	82K	5%	1/4W	
R409	1-249-437-11	CARBON	47K	5%	1/4W	
R425	1-249-437-11	CARBON	47K	5%	1/4W	
R429	1-249-437-11	CARBON	47K	5%	1/4W	
R430	1-249-437-11	CARBON	47K	5%	1/4W	
R431	1-249-438-11	CARBON	56K	5%	1/4W	
R432	1-249-437-11	CARBON	47K	5%	1/4W	
R434	1-247-863-91	CARBON	22K	5%	1/4W	
R435	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R437	1-249-429-11	CARBON	10K	5%	1/4W	
R439	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R440	1-247-863-91	CARBON	22K	5%	1/4W	
R441	1-249-435-11	CARBON	33K	5%	1/4W	
R442	1-249-435-11	CARBON	33K	5%	1/4W	
R443	1-249-434-11	CARBON	27K	5%	1/4W	
R444	1-249-439-11	CARBON	68K	5%	1/4W	
R446	1-249-429-11	CARBON	10K	5%	1/4W	
R447	1-249-437-11	CARBON	47K	5%	1/4W	
R450	1-249-437-11	CARBON	47K	5%	1/4W	
R801	1-249-417-11	CARBON	1K	5%	1/4W	F
R802	1-249-437-11	CARBON	47K	5%	1/4W	
R803	1-249-415-11	CARBON	680	5%	1/4W	F
R804	1-249-435-11	CARBON	33K	5%	1/4W	
⚠R805	1-216-436-00	METAL OXIDE	3.9K	5%	1W	F
⚠R806	1-216-436-00	METAL OXIDE	3.9K	5%	1W	F
⚠R807	1-212-881-11	FUSIBLE	100	5%	1/4W	F
⚠R808	1-220-893-11	METAL	0.22	10%	5W	
R809	1-260-076-11	CARBON	10	5%	1/2W	
R810	1-249-437-11	CARBON	47K	5%	1/4W	
R811	1-249-417-11	CARBON	1K	5%	1/4W	F
R812	1-249-431-11	CARBON	15K	5%	1/4W	
R813	1-249-441-11	CARBON	100K	5%	1/4W	
R814	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R815	1-247-863-91	CARBON	22K	5%	1/4W	
R816	1-249-429-11	CARBON	10K	5%	1/4W	
R817	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R818	1-249-417-11	CARBON	1K	5%	1/4W	F
R819	1-249-439-11	CARBON	68K	5%	1/4W	
⚠R820	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R822	1-247-863-91	CARBON	22K	5%	1/4W	
R823	1-247-863-91	CARBON	22K	5%	1/4W	
R824	1-249-416-11	CARBON	820	5%	1/4W	F
R824	1-249-435-11	CARBON	33K	5%	1/4W	
⚠R825	1-215-891-11	METAL OXIDE	680	5%	2W	F
R827	1-249-441-11	CARBON	100K	5%	1/4W	
R828	1-247-903-00	CARBON	1M	5%	1/4W	
R831	1-249-441-11	CARBON	100K	5%	1/4W	
R832	1-249-441-11	CARBON	100K	5%	1/4W	
R833	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R834	1-249-429-11	CARBON	10K	5%	1/4W	
R835	1-249-437-11	CARBON	47K	5%	1/4W	
R836	1-249-417-11	CARBON	1K	5%	1/4W	F
R837	1-249-435-11	CARBON	33K	5%	1/4W	
R838	1-249-435-11	CARBON	33K	5%	1/4W	
⚠R839	1-215-877-11	METAL OXIDE	22K	5%	1W	F
R840	1-249-402-11	CARBON	56	5%	1/4W	F
⚠R842	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R851	1-249-417-11	CARBON	1K	5%	1/4W	F
R852	1-249-437-11	CARBON	47K	5%	1/4W	
R853	1-249-415-11	CARBON	680	5%	1/4W	F
⚠R855	1-215-891-11	METAL OXIDE	680	5%	2W	F
⚠R857	1-212-881-11	FUSIBLE	100	5%	1/4W	F
⚠R858	1-220-893-11	METAL	0.22	10%	5W	
R859	1-260-076-11	CARBON	10	5%	1/2W	
R860	1-249-437-11	CARBON	47K	5%	1/4W	
R861	1-249-417-11	CARBON	1K	5%	1/4W	F
R862	1-249-431-11	CARBON	15K	5%	1/4W	
R863	1-249-441-11	CARBON	100K	5%	1/4W	
R868	1-249-417-11	CARBON	1K	5%	1/4W	F
R880	1-249-402-11	CARBON	56	5%	1/4W	F
⚠R889	1-215-877-11	METAL OXIDE	22K	5%	1W	F
⚠R902	1-215-916-00	METAL OXIDE	680	5%	3W	F
R903	1-249-429-11	CARBON	10K	5%	1/4W	
R904	1-249-417-11	CARBON	1K	5%	1/4W	F
R905	1-249-429-11	CARBON	10K	5%	1/4W	
R906	1-247-807-31	CARBON	100	5%	1/4W	
R907	1-247-807-31	CARBON	100	5%	1/4W	
R909	1-247-791-91	CARBON	22	5%	1/4W	
		< RELAY >				
RY401	1-755-168-11	RELAY				
RY402	1-515-920-11	RELAY (24V)				
RY403	1-515-920-11	RELAY (24V)				
		< TERMINAL >				
TM401	1-537-842-11	TERMINAL BOARD (FRONT SPEAKER)				
TM402	1-537-510-31	TERMINAL BOARD (SPEAKER) (6P) (SURROUND SPEAKER)				
**********						
	A-4417-488-A	PANEL-VR BOARD, COMPLETE				
		**********				
		< CAPACITOR >				
C610	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C611	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C612	1-164-159-21	CERAMIC	0.1uF		50V	
		< CONNECTOR >				
CN701	1-784-776-11	CONNECTOR, FFC 15P				
		< DIODE >				
D611	8-719-058-04	DIODE	SEL5223S-TP15 (GROOVE)			
D612	8-719-058-04	DIODE	SEL5223S-TP15 (SUPER WOOFER)			
D613	8-719-057-97	DIODE	SEL5923A-TP15 (PRO LOGIC)			
D614	8-719-057-97	DIODE	SEL5923A-TP15 (DVD 5.1CH)			
D615	8-719-057-97	DIODE	SEL5923A-TP15 (K-CON)			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remarks
D616	8-719-058-04	DIODE SEL5223S-TP15 (ENTER)	
D617	8-719-058-04	DIODE SEL5223S-TP15 (DSP)	
D618	8-719-058-04	DIODE SEL5223S-TP15 (EFFECT)	
D619	8-719-075-54	DIODE SLR-325YCT31-NP (MEUN 2)	
D620	8-719-075-54	DIODE SLR-325YCT31-NP (MENU 1)	
D621	8-719-075-54	DIODE SLR-325YCT31-NP (P.FILE)	
D623	8-719-075-54	DIODE SLR-325YCT31-NP (FILE 5)	
D624	8-719-075-54	DIODE SLR-325YCT31-NP (FILE 4)	
D625	8-719-075-54	DIODE SLR-325YCT31-NP (FILE 3)	
D626	8-719-075-54	DIODE SLR-325YCT31-NP (FILE 2)	
D627	8-719-075-54	DIODE SLR-325YCT31-NP (FILE 4)	
		< RESISTOR >	
R760	1-249-438-11	CARBON 56K 5% 1/4W	
R761	1-249-410-11	CARBON 270 5% 1/4W	F
R762	1-249-411-11	CARBON 330 5% 1/4W	
R763	1-249-413-11	CARBON 470 5% 1/4W	F
R764	1-249-414-11	CARBON 560 5% 1/4W	F
R765	1-249-415-11	CARBON 680 5% 1/4W	F
R766	1-249-417-11	CARBON 1K 5% 1/4W	F
R767	1-249-418-11	CARBON 1.2K 5% 1/4W	F
R768	1-249-420-11	CARBON 1.8K 5% 1/4W	F
R769	1-249-422-11	CARBON 2.7K 5% 1/4W	F
R770	1-247-843-11	CARBON 3.3K 5% 1/4W	
R771	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R772	1-249-427-11	CARBON 6.8K 5% 1/4W	F
R773	1-249-429-11	CARBON 10K 5% 1/4W	
R774	1-249-431-11	CARBON 15K 5% 1/4W	
R775	1-249-434-11	CARBON 27K 5% 1/4W	
R776	1-249-438-11	CARBON 56K 5% 1/4W	
R777	1-247-818-91	CARBON 300 5% 1/4W	
R778	1-249-407-11	CARBON 150 5% 1/4W	F
R779	1-249-403-11	CARBON 68 5% 1/4W	F
R780	1-249-403-11	CARBON 68 5% 1/4W	F
R781	1-249-403-11	CARBON 68 5% 1/4W	F
R782	1-249-407-11	CARBON 150 5% 1/4W	F
R783	1-249-407-11	CARBON 150 5% 1/4W	F
R784	1-249-407-11	CARBON 150 5% 1/4W	F
R785	1-249-407-11	CARBON 150 5% 1/4W	F
R786	1-249-407-11	CARBON 150 5% 1/4W	F
R787	1-249-407-11	CARBON 150 5% 1/4W	F
R789	1-249-407-11	CARBON 150 5% 1/4W	F
R790	1-249-407-11	CARBON 150 5% 1/4W	F
R791	1-249-407-11	CARBON 150 5% 1/4W	F
R792	1-249-407-11	CARBON 150 5% 1/4W	F
R793	1-249-407-11	CARBON 150 5% 1/4W	F
R794	1-249-417-11	CARBON 1K 5% 1/4W	F
R795	1-249-417-11	CARBON 1K 5% 1/4W	F
		< SWITCH >	
S625	1-771-215-11	SWITCH, TACTILE (GEQ)	
S626	1-554-303-21	SWITCH, TACTILE (GROOVE)	
S627	1-554-303-21	SWITCH, TACTILE (SUPER WOOFER)	
S628	1-554-303-21	SWITCH, TACTILE (MODE)	
S629	1-554-303-21	SWITCH, TACTILE (PRO LOGIC)	
S630	1-554-303-21	SWITCH, TACTILE (DVD 5.1CH)	
S631	1-554-303-21	SWITCH, TACTILE (K-CON #)	
S632	1-554-303-21	SWITCH, TACTILE (KARAOKE PON/MPX)	
S633	1-554-303-21	SWITCH, TACTILE (ENTER)	
S634	1-554-303-21	SWITCH, TACTILE (GEQ CONTROL)	
S635	1-554-303-21	SWITCH, TACTILE (DSP)	
S636	1-554-303-21	SWITCH, TACTILE (EFFECT)	
S637	1-554-303-21	SWITCH, TACTILE (P.FILE MEMORY)	
S701	1-473-392-11	ENCODER, ROTARY (VOLUME)	

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*	A-4417-711-A	SURROUND AMP BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-128-582-11	ELECT	10uF	20%	100V
C102	1-162-292-31	CERAMIC	680PF	10%	50V
C103	1-162-286-21	CERAMIC	220PF	10%	50V
C104	1-126-967-11	ELECT	47uF	20%	50V
C105	1-136-165-00	FILM	0.1uF	5%	50V
C106	1-136-165-00	FILM	0.1uF	5%	50V
C107	1-128-560-11	ELECT	22uF	20%	100V
C108	1-136-495-11	FILM	0.068uF	5%	50V
C109	1-136-495-11	FILM	0.068uF	5%	50V
C113	1-161-494-00	CERAMIC	0.022uF		25V
C114	1-162-294-31	CERAMIC	0.001uF	10%	50V
C151	1-128-582-11	ELECT	10uF	20%	100V
C152	1-162-292-31	CERAMIC	680PF	10%	50V
C153	1-162-286-21	CERAMIC	220PF	10%	50V
C154	1-126-967-11	ELECT	47uF	20%	50V
C157	1-128-560-11	ELECT	22uF	20%	100V
C158	1-136-495-11	FILM	0.068uF	5%	50V
C159	1-136-495-11	FILM	0.068uF	5%	50V
C181	1-128-582-11	ELECT	10uF	20%	100V
C182	1-162-292-31	CERAMIC	680PF	10%	50V
C183	1-162-286-21	CERAMIC	220PF	10%	50V
C184	1-126-967-11	ELECT	47uF	20%	50V
C188	1-136-495-11	FILM	0.068uF	5%	50V
C189	1-136-495-11	FILM	0.068uF	5%	50V
		< CONNECTOR >			
CN101	1-691-772-11	PLUG (MICRO CONNECTOR) 10P			
CN102	1-691-767-11	PLUG (MICRO CONNECTOR) 5P			
		< DIODE >			
D101	8-719-991-33	DIODE 1SS133T-77			
D151	8-719-991-33	DIODE 1SS133T-77			
D191	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC101	8-749-015-54	IC STK408-040E			
		< TRANSISTOR >			
Q101	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA			
Q103	8-729-140-82	TRANSISTOR 2SA988TP-PAFAEA			
Q104	8-729-620-05	TRANSISTOR 2SC2603TP-EF			
Q151	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA			
Q181	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA			

SURROUND AMP | TABLE SENSOR | TC-A | TC-B

Ref. No.	Part No.	Description				Remarks
		< RESISTOR >				
R101	1-249-417-11	CARBON	1K	5%	1/4W	F
R102	1-249-437-11	CARBON	47K	5%	1/4W	
R103	1-249-411-11	CARBON	330	5%	1/4W	
⚠R107	1-212-881-11	FUSIBLE	100	5%	1/4W	F
R108	1-220-755-11	METAL	0.22	10%	2W	
R109	1-260-076-11	CARBON	10	5%	1/2W	
R110	1-249-437-11	CARBON	47K	5%	1/4W	
R111	1-249-417-11	CARBON	1K	5%	1/4W	F
R112	1-249-431-11	CARBON	15K	5%	1/4W	
R113	1-249-441-11	CARBON	100K	5%	1/4W	
R114	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R115	1-247-863-91	CARBON	22K	5%	1/4W	
R116	1-249-429-11	CARBON	10K	5%	1/4W	
R117	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R119	1-249-439-11	CARBON	68K	5%	1/4W	
⚠R120	1-217-637-00	FUSIBLE	1	5%	1/4W	F
R121	1-247-863-91	CARBON	22K	5%	1/4W	
R130	1-249-435-11	CARBON	33K	5%	1/4W	
R151	1-249-417-11	CARBON	1K	5%	1/4W	F
R152	1-249-437-11	CARBON	47K	5%	1/4W	
R153	1-249-410-11	CARBON	270	5%	1/4W	F
⚠R157	1-212-881-11	FUSIBLE	100	5%	1/4W	F
R158	1-220-755-11	METAL	0.22	10%	2W	
R159	1-260-076-11	CARBON	10	5%	1/2W	
R160	1-249-437-11	CARBON	47K	5%	1/4W	
R161	1-249-417-11	CARBON	1K	5%	1/4W	F
R162	1-249-431-11	CARBON	15K	5%	1/4W	
R163	1-249-441-11	CARBON	100K	5%	1/4W	
R181	1-249-417-11	CARBON	1K	5%	1/4W	F
R182	1-249-437-11	CARBON	47K	5%	1/4W	
R183	1-249-411-11	CARBON	330	5%	1/4W	
R188	1-220-755-11	METAL	0.22	10%	2W	
R189	1-260-076-11	CARBON	10	5%	1/2W	
R190	1-249-437-11	CARBON	47K	5%	1/4W	
R191	1-249-417-11	CARBON	1K	5%	1/4W	F
R192	1-249-431-11	CARBON	15K	5%	1/4W	
R193	1-249-441-11	CARBON	100K	5%	1/4W	
**********						
*	1-659-058-13	TABLE SENSOR BOARD				
		**********				
		< IC >				
IC202	8-749-924-18	PHOTO INTERRUPTER RPI-1391				
		< RESISTOR >				
R207	1-249-416-11	CARBON	820	5%	1/4W	F
**********						
*	1-672-193-11	TC-A BOARD				
		**********				
		< DIODE >				
D631	8-719-058-03	DIODE SEL5423E-TP15 (TC-A FWD)				
D632	8-719-058-03	DIODE SEL5423E-TP15 (TC-A REV)				

Ref. No.	Part No.	Description				Remarks
		< RESISTOR >				
R701	1-249-417-11	CARBON	1K	5%	1/4W	F
R702	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R703	1-249-420-11	CARBON	1.8K	5%	1/4W	F
R704	1-249-422-11	CARBON	2.7K	5%	1/4W	F
R705	1-247-843-11	CARBON	3.3K	5%	1/4W	
R706	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R707	1-247-804-11	CARBON	75	5%	1/4W	
R708	1-247-804-11	CARBON	75	5%	1/4W	
		< SWITCH >				
S641	1-554-303-21	SWITCH, TACTILE (TC-A FWD)				
S642	1-554-303-21	SWITCH, TACTILE (TC-A REV)				
S643	1-554-303-21	SWITCH, TACTILE (TC-A STOP)				
S644	1-554-303-21	SWITCH, TACTILE (TC-A REW)				
S645	1-554-303-21	SWITCH, TACTILE (TC-A FF)				
S646	1-554-303-21	SWITCH, TACTILE (TC-A DOLBY ON)				
S647	1-554-303-21	SWITCH, TACTILE (TC-A DIRECTION)				
**********						
*	1-672-194-11	TC-B BOARD				
		**********				
		< DIODE >				
D635	8-719-058-03	DIODE SEL5423E-TP15 (TC-B REV)				
D636	8-719-058-03	DIODE SEL5423E-TP15 (TC-B FWD)				
D637	8-719-057-97	DIODE SEL5923A-TP15 (TC-B PAUSE)				
D638	8-719-058-04	DIODE SEL5223S-TP15 (TC-B REC)				
		< RESISTOR >				
R711	1-249-410-11	CARBON	270	5%	1/4W	F
R712	1-249-411-11	CARBON	330	5%	1/4W	
R713	1-249-413-11	CARBON	470	5%	1/4W	F
R714	1-249-414-11	CARBON	560	5%	1/4W	F
R715	1-249-415-11	CARBON	680	5%	1/4W	F
R716	1-249-417-11	CARBON	1K	5%	1/4W	F
R717	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R718	1-249-420-11	CARBON	1.8K	5%	1/4W	F
R719	1-249-422-11	CARBON	2.7K	5%	1/4W	F
R720	1-247-804-11	CARBON	75	5%	1/4W	
R721	1-247-804-11	CARBON	75	5%	1/4W	
R722	1-247-807-31	CARBON	100	5%	1/4W	
R723	1-249-407-11	CARBON	150	5%	1/4W	F
		< SWITCH >				
S651	1-554-303-21	SWITCH, TACTILE (TC-B FWD)				
S652	1-554-303-21	SWITCH, TACTILE (TC-B REV)				
S653	1-554-303-21	SWITCH, TACTILE (TC-B STOP)				
S654	1-554-303-21	SWITCH, TACTILE (TC-B REW)				
S655	1-554-303-21	SWITCH, TACTILE (TC-B FF)				
S656	1-554-303-21	SWITCH, TACTILE (TC-B PAUSE)				
S657	1-554-303-21	SWITCH, TACTILE (TC-B REC)				
S658	1-554-303-21	SWITCH, TACTILE (HI-SPEED DUB)				
S659	1-554-303-21	SWITCH, TACTILE (CD SYNCHRO)				
**********						

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
	1-673-110-11	TRANS BOARD			
		**********			
	1-533-233-21	HOLDER, FUSE			
		< CAPACITOR >			
C843	1-130-777-00	FILM	0.1uF	10%	100V
C893	1-130-777-00	FILM	0.1uF	10%	100V
C961	1-162-306-11	CERAMIC	0.01uF	30%	16V
C963	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
* CN901	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P			
* CN952	1-564-528-11	PLUG, CONNECTOR 13P			
		< DIODE >			
D832	8-719-060-53	DIODE RBV-2506			
		< FUSE >			
⚠F951	1-532-505-31	FUSE T5AL/250V (EA,MY,SP,IA)			
⚠F961	1-532-506-31	FUSE T6.3A/250V			
⚠F962	1-532-506-31	FUSE T6.3A/250V			
⚠F963	1-532-506-31	FUSE T6.3A/250V			
⚠F964	1-532-506-31	FUSE T6.3A/250V			
		< RESISTOR >			
⚠R951	1-219-120-11	FUSIBLE	0.15	5%	1/4W F
⚠R952	1-219-120-11	FUSIBLE	0.15	5%	1/4W F
⚠R953	1-219-119-81	FUSIBLE	0.1	5%	1/4W F
		< TRANSFORMER >			
⚠T951	1-433-613-11	TRANSFORMER, POWER			
		< SWITCH >			
⚠VS901	1-771-291-11	SWITCH, POWER (VOLTAGE SELECTOR)			(EA,MY,SP,IA)
**********					
	A-4724-725-A	VIDEO BOARD, COMPLETE (EA,MY,SP,IA)			
		**********			
	A-4724-929-A	VIDEO BOARD, COMPLETE (TH)			
		**********			
		< CAPACITOR >			
C101	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C102	1-163-143-00	CERAMIC CHIP	0.0012uF	5%	50V
C103	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C104	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C201	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C202	1-163-143-00	CERAMIC CHIP	0.0012uF	5%	50V
C203	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C301	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C302	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C303	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C304	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C305	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C306	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C310	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C311	1-216-295-91	SHORT 0			

Ref. No.	Part No.	Description			Remarks
C313	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C314	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C318	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C319	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C401	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C402	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C403	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C404	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C405	1-110-530-11	ELECT CHIP	1000uF	20%	6.3V (EA,MY,SP,IA)
C405	1-126-206-11	ELECT CHIP	100uF	20%	6.3V (TH)
C406	1-110-530-11	ELECT CHIP	1000uF	20%	6.3V (EA,MY,SP,IA)
C406	1-126-206-11	ELECT CHIP	100uF	20%	6.3V (TH)
C409	1-124-778-00	ELECT CHIP	22uF	20%	6.3V (EA,MY,SP,IA)
C409	1-128-996-11	ELECT CHIP	4.7uF	20%	50V (TH)
C410	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C411	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C412	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C413	1-124-778-00	ELECT CHIP	22uF	20%	6.3V (EA,MY,SP,IA)
C413	1-126-601-11	ELECT CHIP	2.2uF	20%	50V (TH)
C452	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C471	1-124-778-00	ELECT CHIP	22uF	20%	6.3V (TH)
C472	1-124-778-00	ELECT CHIP	22uF	20%	6.3V (TH)
C501	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C502	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C503	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C504	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C505	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C506	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C507	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C509	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C510	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C531	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C532	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C535	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C536	1-126-193-11	ELECT	1uF	20%	50V
C537	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C539	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C540	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C541	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C542	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C543	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C544	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C545	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C546	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C547	1-126-193-11	ELECT	1uF	20%	50V
C548	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C549	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C550	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C551	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C552	1-165-319-11	CERAMIC CHIP	0.1uF		50V

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

VIDEO

Ref. No.	Part No.	Description			Remarks
C553	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C555	1-124-779-00	ELECT CHIP	10uF	20%	16V
C556	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C559	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C560	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C561	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C562	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C563	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C564	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C565	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C566	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C568	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C569	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C570	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C571	1-128-065-11	ELECT CHIP	68MF	20%	10V
C573	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C574	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C576	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C577	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
		< CONNECTOR >			
* CN301	1-564-506-11	PLUG, CONNECTOR 3P			
CN501	1-770-706-11	CONNECTOR, FFC/FPC 23P			
CN503	1-779-416-11	CONNECTOR,FFC(LIF(NON-ZIF))13P			
		< TRIMMER >			
CT503	1-141-539-11	CAP, ADJ 10PF			
		< DIODE >			
D301	8-719-054-23	DIODE RB706D-40-T146			
D501	8-719-422-12	DIODE UDZ-TE-17-3.9B			
D502	8-719-018-51	DIODE CL-170R-CD-T (SELF-DIAGNOSIS)			
		< IC >			
IC101	8-759-701-39	IC NJM2100M(TE2)			
IC401	8-759-262-00	IC MC14576CFEL (EA,MY,SP,IA)			
IC401	8-759-177-02	IC NJM2267M(TE2) (TH)			
IC501	8-759-269-92	IC SN74HCU04ANSR			
IC502	8-759-587-67	IC M30620MC-A05FP			
IC504	8-759-269-92	IC SN74HCU04ANSR			
IC505	8-759-535-48	IC CL680T-D1			
IC506	8-759-573-23	IC LC372100PM-J48-TLA			
IC507	8-759-342-01	IC MSM514260C-60JS			
IC509	8-759-535-62	IC PCM1727E-2/T2			
		< JACK >			
J301	1-537-943-11	TERMINAL, S (S VIDEO OUT)			
		< JUMPER RESISTOR >			
JW101	1-216-295-91	SHORT 0			
JW201	1-216-295-91	SHORT 0			
JW401	1-216-295-91	SHORT 0			
JW402	1-216-295-91	SHORT 0			
JW403	1-216-295-91	SHORT 0			
JW404	1-216-295-91	SHORT 0			
JW405	1-216-295-91	SHORT 0			
JW413	1-216-295-91	SHORT 0			
JW421	1-216-295-91	SHORT 0			
JW422	1-216-295-91	SHORT 0			

Ref. No.	Part No.	Description			Remarks
JW502	1-216-295-91	SHORT 0			
JW503	1-216-295-91	SHORT 0			
JW504	1-216-295-91	SHORT 0			
JW505	1-216-295-91	SHORT 0			
		< COIL >			
L301	1-410-372-21	INDUCTOR CHIP 1.8uH			
L302	1-410-372-21	INDUCTOR CHIP 1.8uH			
L501	1-216-296-91	SHORT 0			
L502	1-216-296-91	SHORT 0			
L503	1-216-296-91	SHORT 0			
L504	1-410-375-11	INDUCTOR CHIP 3.3uH			
L505	1-216-296-91	SHORT 0			
L506	1-216-296-91	SHORT 0			
L507	1-216-296-91	SHORT 0			
L508	1-216-296-91	SHORT 0			
L509	1-216-296-91	SHORT 0			
L510	1-216-296-91	SHORT 0			
		< TRANSISTOR >			
Q301	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L			
Q302	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L			
Q303	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L			
Q304	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L			
Q306	8-729-027-44	TRANSISTOR DTC114TKA-T146			
Q307	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L			
Q308	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L			
Q310	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L			
Q453	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR			
Q454	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR			
Q502	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L			
Q531	8-729-140-75	TRANSISTOR 2SD999-T1-CLCK			
		< RESISTOR >			
R101	1-216-073-00	METAL CHIP	10K	5%	1/10W
R102	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R103	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R105	1-216-295-91	SHORT	0		
R201	1-216-073-00	METAL CHIP	10K	5%	1/10W
R202	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R203	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R205	1-216-295-91	SHORT	0		
R301	1-216-624-11	METAL CHIP	75	0.5%	1/10W
R302	1-216-624-11	METAL CHIP	75	0.5%	1/10W
R305	1-216-049-91	RES,CHIP	1K	5%	1/10W (EA,MY,SP,IA)
R305	1-216-041-00	METAL CHIP	470	5%	1/10W (TH)
R306	1-216-073-00	METAL CHIP	10K	5%	1/10W
R307	1-216-049-91	RES,CHIP	1K	5%	1/10W
R308	1-216-049-91	RES,CHIP	1K	5%	1/10W
R309	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R312	1-216-073-00	METAL CHIP	10K	5%	1/10W
R313	1-216-049-91	RES,CHIP	1K	5%	1/10W (EA,MY,SP,IA)
R313	1-216-033-00	METAL CHIP	220	5%	1/10W (TH)
R314	1-216-049-91	RES,CHIP	1K	5%	1/10W (EA,MY,SP,IA)

Ref. No.	Part No.	Description			Remarks
R314	1-216-033-00	METAL CHIP	220	5%	1/10W (TH)
R315	1-216-047-91	RES,CHIP	820	5%	1/10W
R316	1-216-657-11	METAL CHIP	1.8K	0.5%	1/10W (EA,MY,SP,IA)
R316	1-216-651-11	METAL CHIP	1K	0.5%	1/10W (TH)
R317	1-216-683-11	METAL CHIP	22K	0.5%	1/10W (EA,MY,SP,IA)
R317	1-216-669-11	METAL CHIP	5.6K	0.5%	1/10W (TH)
R318	1-216-033-00	METAL CHIP	220	5%	1/10W
R319	1-216-049-91	RES,CHIP	1K	5%	1/10W
R320	1-216-651-11	METAL CHIP	1K	0.5%	1/10W (EA,MY,SP,IA)
R320	1-216-643-11	METAL CHIP	470	0.5%	1/10W (TH)
R321	1-216-049-91	RES,CHIP	1K	5%	1/10W (EA,MY,SP,IA)
R321	1-216-031-00	METAL CHIP	180	5%	1/10W (TH)
R324	1-216-022-00	METAL CHIP	75	5%	1/10W
R325	1-216-295-91	SHORT 0			
R327	1-216-049-91	RES,CHIP	1K	5%	1/10W (EA,MY,SP,IA)
R327	1-216-031-00	METAL CHIP	180	5%	1/10W (TH)
R328	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W (EA,MY,SP,IA)
R328	1-216-649-11	METAL CHIP	820	0.5%	1/10W (TH)
R329	1-216-649-11	METAL CHIP	820	0.5%	1/10W (EA,MY,SP,IA)
R329	1-216-643-11	METAL CHIP	470	0.5%	1/10W (TH)
R332	1-216-651-11	METAL CHIP	1K	0.5%	1/10W (EA,MY,SP,IA)
R332	1-216-645-11	METAL CHIP	560	0.5%	1/10W (TH)
R333	1-216-046-00	METAL CHIP	750	5%	1/10W (EA,MY,SP,IA)
R333	1-216-031-00	METAL CHIP	180	5%	1/10W (TH)
R335	1-216-073-00	METAL CHIP	10K	5%	1/10W (EA,MY,SP,IA)
R335	1-216-079-00	METAL CHIP	18K	5%	1/10W (TH)
R336	1-216-073-00	METAL CHIP	10K	5%	1/10W
R337	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W (TH)
R340	1-216-022-00	METAL CHIP	75	5%	1/10W
R341	1-216-121-91	RES,CHIP	1M	5%	1/10W
R342	1-216-022-00	METAL CHIP	75	5%	1/10W
R403	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R404	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R405	1-216-065-91	RES,CHIP	4.7K	5%	1/10W (EA,MY,SP,IA)
R405	1-216-073-00	METAL CHIP	10K	5%	1/10W (TH)

Ref. No.	Part No.	Description			Remarks
R406	1-216-081-00	METAL CHIP	22K	5%	1/10W (EA,MY,SP,IA)
R406	1-216-079-00	METAL CHIP	18K	5%	1/10W (TH)
R407	1-216-073-00	METAL CHIP	10K	5%	1/10W (EA,MY,SP,IA)
R408	1-216-073-00	METAL CHIP	10K	5%	1/10W (EA,MY,SP,IA)
R409	1-216-049-91	RES,CHIP	1K	5%	1/10W (EA,MY,SP,IA)
R410	1-216-049-91	RES,CHIP	1K	5%	1/10W (EA,MY,SP,IA)
R411	1-216-073-00	METAL CHIP	10K	5%	1/10W
R412	1-216-073-00	METAL CHIP	10K	5%	1/10W
R414	1-216-081-00	METAL CHIP	22K	5%	1/10W
R415	1-216-081-00	METAL CHIP	22K	5%	1/10W
R423	1-216-073-00	METAL CHIP	10K	5%	1/10W (EA,MY,SP,IA)
R423	1-216-055-00	METAL CHIP	1.8K	5%	1/10W (TH)
R424	1-216-073-00	METAL CHIP	10K	5%	1/10W (EA,MY,SP,IA)
R424	1-216-049-91	RES,CHIP	1K	5%	1/10W (TH)
R425	1-216-073-00	METAL CHIP	10K	5%	1/10W
R426	1-216-073-00	METAL CHIP	10K	5%	1/10W
R457	1-216-025-91	RES,CHIP	100	5%	1/10W
R458	1-216-025-91	RES,CHIP	100	5%	1/10W
R459	1-216-025-91	RES,CHIP	100	5%	1/10W
R461	1-216-025-91	RES,CHIP	100	5%	1/10W
R462	1-216-025-91	RES,CHIP	100	5%	1/10W
R463	1-216-025-91	RES,CHIP	100	5%	1/10W
R464	1-216-025-91	RES,CHIP	100	5%	1/10W
R501	1-216-025-91	RES,CHIP	100	5%	1/10W
R502	1-216-025-91	RES,CHIP	100	5%	1/10W
R503	1-216-025-91	RES,CHIP	100	5%	1/10W
R504	1-216-025-91	RES,CHIP	100	5%	1/10W
R505	1-216-025-91	RES,CHIP	100	5%	1/10W
R506	1-216-025-91	RES,CHIP	100	5%	1/10W
R507	1-216-073-00	METAL CHIP	10K	5%	1/10W
R508	1-216-081-00	METAL CHIP	22K	5%	1/10W
R509	1-216-081-00	METAL CHIP	22K	5%	1/10W
R510	1-216-081-00	METAL CHIP	22K	5%	1/10W
R511	1-216-081-00	METAL CHIP	22K	5%	1/10W
R512	1-216-081-00	METAL CHIP	22K	5%	1/10W
R513	1-216-081-00	METAL CHIP	22K	5%	1/10W
R514	1-216-081-00	METAL CHIP	22K	5%	1/10W
R516	1-216-073-00	METAL CHIP	10K	5%	1/10W
R517	1-216-073-00	METAL CHIP	10K	5%	1/10W
R518	1-216-073-00	METAL CHIP	10K	5%	1/10W
R519	1-216-025-91	RES,CHIP	100	5%	1/10W
R520	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R523	1-216-013-00	METAL CHIP	33	5%	1/10W
R530	1-216-081-00	METAL CHIP	22K	5%	1/10W
R531	1-216-025-91	RES,CHIP	100	5%	1/10W
R532	1-216-025-91	RES,CHIP	100	5%	1/10W
R533	1-216-025-91	RES,CHIP	100	5%	1/10W
R534	1-216-073-00	METAL CHIP	10K	5%	1/10W
R535	1-216-073-00	METAL CHIP	10K	5%	1/10W
R536	1-216-033-00	METAL CHIP	220	5%	1/10W

VIDEO

Ref. No.	Part No.	Description			Remarks
R537	1-216-025-91	RES,CHIP	100	5%	1/10W
R538	1-216-073-00	METAL CHIP	10K	5%	1/10W
R542	1-216-049-91	RES,CHIP	1K	5%	1/10W
R543	1-216-685-11	METAL CHIP	27K	0.5%	1/10W
R544	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R545	1-216-025-91	RES,CHIP	100	5%	1/10W
R546	1-216-049-91	RES,CHIP	1K	5%	1/10W
R547	1-216-295-91	SHORT 0			
R548	1-216-049-91	RES,CHIP	1K	5%	1/10W
R549	1-216-025-91	RES,CHIP	100	5%	1/10W
R550	1-216-025-91	RES,CHIP	100	5%	1/10W
R551	1-216-025-91	RES,CHIP	100	5%	1/10W
R552	1-216-025-91	RES,CHIP	100	5%	1/10W
R554	1-216-025-91	RES,CHIP	100	5%	1/10W
R555	1-216-121-91	RES,CHIP	1M	5%	1/10W
R556	1-216-025-91	RES,CHIP	100	5%	1/10W
R557	1-216-025-91	RES,CHIP	100	5%	1/10W
R558	1-216-073-00	METAL CHIP	10K	5%	1/10W
R559	1-216-073-00	METAL CHIP	10K	5%	1/10W
R560	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R561	1-216-049-91	RES,CHIP	1K	5%	1/10W
R562	1-216-025-91	RES,CHIP	100	5%	1/10W
R563	1-216-025-91	RES,CHIP	100	5%	1/10W
R564	1-216-025-91	RES,CHIP	100	5%	1/10W
R565	1-216-025-91	RES,CHIP	100	5%	1/10W
R566	1-216-025-91	RES,CHIP	100	5%	1/10W
R567	1-216-073-00	METAL CHIP	10K	5%	1/10W
R568	1-216-073-00	METAL CHIP	10K	5%	1/10W
R569	1-216-073-00	METAL CHIP	10K	5%	1/10W
R572	1-216-073-00	METAL CHIP	10K	5%	1/10W
R573	1-216-073-00	METAL CHIP	10K	5%	1/10W
R574	1-216-073-00	METAL CHIP	10K	5%	1/10W
R577	1-216-081-00	METAL CHIP	22K	5%	1/10W
R578	1-216-081-00	METAL CHIP	22K	5%	1/10W
R579	1-216-073-00	METAL CHIP	10K	5%	1/10W
R580	1-216-073-00	METAL CHIP	10K	5%	1/10W
		< SWITCH >			
S501	1-571-395-11	SWITCH, SLIDE (SYSTEM SELECT)			
		< VIBRATOR >			
X501	1-767-510-11	VIBRATOR, CERAMIC 10MHz			
X503	1-767-519-11	VIBRATOR, CRYSTAL 27MHz			

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Ref. No.	Part No.	Description	Remarks
		MISCELLANEOUS	
		**********	
1	1-769-977-11	WIRE (FLAT TYPE) (13 CORE) (150 mm)	
5	1-233-545-11	TUNER (FM/AM)	
61	1-773-002-11	WIRE (FLAT TYPE) (15 CORE) (80 mm)	
62	1-773-032-11	WIRE (FLAT TYPE) (15 CORE) (400 mm)	
⚠152	1-569-007-11	ADAPTOR, CONVERSION 2P (IA)	
⚠152	1-569-008-21	ADAPTOR, CONVERSION 2P (EA,MY,SP)	
156	1-790-660-11	WIRE (FLAT TYPE) (23 CORE)	
158	1-790-288-11	WIRE (FLAT TYPE) (13 CORE) (350 mm)	
160	1-773-006-11	WIRE (FLAT TYPE) (15 CORE) (120 mm)	
161	1-773-056-11	WIRE (FLAT TYPE) (17 CORE)	
507	1-452-925-21	MAGNET ASSY	
⚠601	8-820-020-02	OPTICAL PICK-UP KSS-213D/Q-NP	
602	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
⚠CNP901	1-558-943-41	CORD, POWER (TH,IA)	
⚠CNP901	1-575-651-21	CORD, POWER (EA,MY,SP)	
HP101	A-2056-683-B	DECK (A) ASSY, HEAD (230PWR2)(*NOTE)	
HP101	A-2056-681-B	DECK (A) ASSY, HEAD (230AWR2)(*NOTE)	
HRPE101	A-2056-684-B	DECK (B) ASSY, HEAD (230PWR2)(*NOTE)	
HRPE101	A-2056-682-B	DECK (B) ASSY, HEAD (230AWR2)(*NOTE)	
M1	A-2004-628-A	MOTOR ASSY, CAPSTAN	
M101	X-4917-523-3	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	
M201	A-4660-977-A	MOTOR ASSY (TABLE)	
M901	1-698-792-11	FAN, DC	
⚠T951	1-433-613-11	TRANSFORMER, POWER	
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-871-01	SCREW +BVTT 3×6 (S)	
#2	7-685-872-09	SCREW +BVTT 3×8 (S)	
#3	7-685-646-79	SCREW +BVTP 3×8 TYPE2 N-S	
#4	7-685-534-19	SCREW +BTP 2.6×8 TYPE2 N-S	
#5	7-685-533-19	SCREW +BTP 2.6×6 TYPE2 N-S	
#6	7-685-105-19	SCREW +P 2×8 TYPE2 NON-SLIT	
#7	7-685-650-79	SCREW +BVTP 3×16 TYPE2 IT-3	
#8	7-685-881-09	SCREW +BVTT 4×8 (S)	
#9	7-685-853-04	SCREW +BVTT 2×6 (S)	
#10	7-685-850-04	SCREW +BVTT 2×3 (S)	
#11	7-685-851-04	SCREW +BVTT 2×4 (S)	
#12	7-628-254-15	SCREW +PS 2.6×6	
#13	7-628-254-50	SCREW +PS 2.6×16	

*NOTE : Refer to page 73

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Sony Corporation
Home Audio Company

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